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View of Algonquin Park Station and The Highland Inn, Cache Lake, Algonquin Provincial Park.

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Ontario. Lands and Forests, Dep. of I

REPORT

— 1915/16 — 1917/18

OF THE

Minister of Lands, Forests and Mines

OF THE

PROVINCE OF ONTARIO

For the Year Ending 31st October

1916 — 1918

3 vol. in 1

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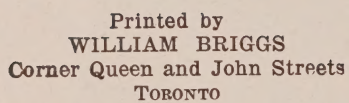


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Report of the Minister of Lands, Forests and Mines of the Province of Ontario

For the Year Ending 31st October, 1916

To His Honour the Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to submit for the information of your Honour and the Legislative Assembly a report for the fiscal year ending 31st October, 1916, of the management of the Crown Lands of the Province.

CLERGY LANDS.

The collection on account of Clergy Lands was \$1,692.32. No land was disposed of during the year. (See Appendix No. 3, page 8.)

COMMON SCHOOL LANDS.

The area sold during the year was 50 acres. The collection on account of those and former sales was \$3,760.48. (See Appendix No. 3, page 8.)

UNIVERSITY LANDS.

The area of these lands sold during the year was 2,967.50 acres for \$1,483.75. The collection on account of these and former sales was \$1,518.51. (See Appendix No. 3, page 8.)

CROWN LANDS.

There was sold during the year for agricultural and town site areas 98,209.02 acres for \$66,815.98. The collection on account of these and former sales was \$83,533.03. There was sold for mining purposes 14,592.11 acres for \$37,756.28. There was collected on account of these and former sales \$36,457.56.

There was leased for mining purposes 5,858.04 acres for \$5,858.04. There was collected on account of these leases and those of former years \$16,218.36. There was leased of Crown lands an area of 11,689 acres for \$1,170.87. There was collected on account of these and the leases of former years \$50,756.43.

The total area of Crown lands disposed of by sale and lease during the year was 133,447.01 acres for a value of \$113,397.18, as compared with 174,199 acres sold and leased in 1914 for \$134,433. The total collection on account of the sales, leases, etc., was \$194,057.82. (See Appendix No. 3, page 8.)

SALES.

Under Part 1 of the *Public Lands Act*, 98,209 acres were sold for farming during the year as compared with 146,307.19 acres for 1915, a very appreciable decrease, but one not altogether unexpected in view of disturbed economic labour and immigration conditions due to the war. During 1915 in the Temiskaming and Hearst Section of Northern Ontario 889 persons purchased farms, while for the past year only 641 settlers secured holdings, or an average for the two war years of 765, whereas the average for the two years prior, 1913 and 1914, part of which was covered by the early stages of the war, was nearly 200 greater.

The reduction in the last two years is largely, if not wholly, attributed to the above-mentioned conditions occasioned by the war, a large percentage of those whom we would expect to settle having enlisted for active service. Already over 400 actual settlers have requested and been granted protection by virtue of their enlistment, and no doubt others have donned the khaki without taking the necessary precautions to advise the Department, but careful enquiries are made if a question arises as to the possibility of a land holder being a soldier when his claim is sought to be cancelled.

RANCHING LEASES, ETC.

Throughout the year many enquiries have been made as to the ranching business which the Department is endeavouring to encourage on those areas of land that have been partly burnt over, denuded of the timber and untillable in the general acceptance of the term. Large tracts of such areas exist in different parts of the Province, both in Old and New Ontario, where the land is hilly and broken with intervening valleys producing excellent fodder. Practically the entire Trent Valley section or that region between Lake Ontario and Georgian Bay lying in a north-westerly line consists of tracts of land that have lain waste for years and only await the arrival of a practical cattle or sheep raising man.

Four ranching leases were issued during the year, the lessees being required to put on and maintain a certain number of head of stock, cattle or sheep, or both, the number determinable by the size and capabilities of the land. Rentals are at the rate of 5 cents an acre per annum and a short or long term lease of 7 to 21 years with reasonable conditions prevails. The success attained by some ranchers within the last three years has urged others to promote the cause and is sufficient to justify the belief that ranching on Crown Lands in the Province, now in its infancy, will grow to large proportions.

There were in addition to the four leases above mentioned fourteen Crown Leases issued during the year for various purposes such as mining, water lots, church sites, water powers, etc.

Licenses of Occupation to the number of 42 were issued, the majority for mining purposes, while seven of them covered water lots and three lumbering operations.

The long established system of dealing with water lot applications has been materially changed, and now preparatory to treating such cases an official inspection and a careful valuation is made, the report of the engineer being the basis upon which the Department acts as to leasing, granting or issuing Licenses of Occupation. The departure has already considerably augmented the public revenues.

FREE GRANTS.

During the fiscal year ending October 31st, 1916, locations of Free Grant land were carried out to only 620 persons as against 1,355 persons for the preceding year, while 155 persons purchased land in Free Grant territory as against 200 for the year ending 31st October, 1915.

Permission was granted to 232 locatees to assign their locations, the new parties being required to meet all the requirements incidental to the issue of patents.

The total area allotted to the 775 Free Grant settlers was 90,330 acres, or less than one-half the aggregate for the previous year.

Patents issued to 421 Free Grant settlers who satisfied the requirements of building, residence, clearing and cultivation.

An analysis of this year's work with that of last year reveals the fact that the important falling off of locations is in the newer parts of the Province. The Port Arthur section alone dropped from 301 locatees to 119, of whom 39 were assignees of former locatees. Rainy River and Kenora Districts furnished only about one-half that of last year, while noticeable reductions are also found in Sudbury and Nipissing Districts.

The Free Grant sections of Old Ontario have likewise experienced a decided lull in homesteading. The office of the Crown Land Agent at Warren, in the Sudbury District was closed and a new agency established at Markstay for the same townships, the latter place being deemed more convenient. Blezard Valley Agency was also closed, the necessity for its continuance being obviated by reason of practically all the land being granted. For the purpose of meeting the occasional demands of settlers in this section the townships forming such agency were transferred to Sudbury where they are now handled by the local agent.

These figures are the lowest that have obtained in Free Grant transactions for many years, and though the difference between this year and former years is quite noticeable the reasons are more or less obvious. With the exception of two additional concessions in the townships of Gorham and Ware in the Thunder Bay district no new lands were placed during the year under the operation of the Free Grant Section of the Public Lands Act, and as by far the greater percentage of the arable areas of townships at present open have been disposed of by location or otherwise, the opportunities for selection are not so wide. Again the general publicity and attention given to the Great Clay Belt in the Temiskaming district where there are no Free Grant areas has detracted from Free Grant sections that might otherwise be sought by prospective settlers. Besides, several townships in the Sudbury district were withdrawn from settlement by reason of their proximity to the roasting beds of the Copper Company, the Department not desiring to encourage settlement on lands where clearance and crops might be imperilled by sulphur smoke.

Finally the continuous call to arms and the ready answer by many settlers and would-be land takers, together with the effects of the great war upon immigration, has had disastrous effects upon the numbers seeking and securing free homesteads.

MILITARY GRANTS.

The total number of Military Certificates issued to date, under the Veterans Land Grant Act, 1 Edw. VII, Cap. 6, and amendments thereto, is 13,998. During the year 57 letters were received from men or from the next of kin of veterans who had served on the frontier during the Fenian Raid, but had only now heard of this

grant and asked for application forms. As the time for receiving these applications expired on 30th September, 1908, these application forms could not be sent to them.

During the year there have been 76 certificates located covering 12,018 acres in the townships open for veterans, making in all a total of 8,174 certificates located.

There were 12 certificates surrendered to the Crown for the \$50.00 commutation money, this makes a total of 3,254 certificates surrendered.

In 18 cases the certificates have been surrendered and applied in payment of lands purchased from the Crown, covering in all 2,736 acres, making a total of 760 certificates that have been applied in this manner.

During the year there have been 132 patents issued for lands located by veterans, making a total of 7,064 thus disposed of.

The total number, therefore, of certificates that have now been redeemed is 12,251, leaving 1,747 still outstanding.

Under the Act 1st Edw. VII, Cap. 6, and amendments thereto covering these grants it is necessary for all locatees of the lands granted under this Act to apply for their patents for such land before ten years have expired from date of location. If this application for patent is not made within the ten years then the land comes under the settlement regulations, and unless the settlement duties are proceeded with, the locations are liable to cancellation. Previous to the expiration of the ten years after location, the Department has sent a notice to each veteran who should apply for his patent stating this fact, and in this manner have saved many of the locations from becoming subject to the settlement duties. See Appendix No. 11, page 37.

FINANCIAL AID TO SETTLERS.

Under the Legislation passed at the Session of 1916, a Settlers' Loan Commission was appointed.

The Loan Commissioner will have available, out of the Northern Ontario Development Fund, money to advance to settlers on the land, chattels and crops. The loan will bear a low rate of interest and the patent to the land will be held as final security.

Applicants for loans will deal directly with the Loan Commissioner thus avoiding delay and expense. The appointment of the Loan Commissioner was made in time, and the office sufficiently organized, to render useful and satisfactory service to many who suffered in the recent disastrous fire in Northern Ontario. One hundred thousand dollars was set aside out of the fund to assist settlers. The full weight of this tragedy was hardly realized in the older portions of the Province. The call for help that came from the north was insistent, but the response was ready. Trains were despatched from North Bay carrying doctors, nurses, medical supplies, food and clothing. Once the physical wants of the people were cared for the problem of re-habilitating the district, and preventing a recurrence of the horror, was taken up. The Loan Commissioner was able, with the money placed at his disposal, to co-operate with the Department in securing supplies of lumber and other necessities to enable the settlers to build homes against the coming winter.

During the period from August 12th to October 31st, 1916, 606 applications for loans were received covering an aggregate amount of \$230,800.

Owing to conditions existing in the district of Temiskaming, caused by the disastrous fires, every effort was made to grant as much assistance as possible to

those desiring loans in that district, and after inspections had been made 121 loans were granted amounting to \$36,525.

Consideration is now being devoted to all other districts, and from the number of applications received since the Act has been put into effect it would appear that the settlers generally are desirous of taking advantage of the opportunity presented to secure funds for a further improvement of their farms.

For particulars of applications and the distributing of loans, see Appendix No. 32, page No. 93.

THE MINING INDUSTRY.

The Bureau of Mines has collected returns from the metalliferous mines and works of Ontario showing the production for the nine months ending 30th September, 1916. Following are the figures for the period, and for purposes of comparison, figures for the corresponding period of last year. It will be noted that there has been a large increase in the aggregate value, and also in the value of nearly all the individual products, due to causes mentioned in the notes appended.

SUMMARY OF MINERAL PRODUCTION FIRST NINE MONTHS OF 1916.

Product.	Quantity.		Value.	
	1915	1916	1915	1916
Cobalt ore, tons	92	98	\$12,472	\$10,591
“ oxide, lbs.	135,337	378,732	107,363	231,947
“ metallic, lbs.	76,979	172,055	66,552	146,467
Cobalt and nickle oxides (unseparated), lbs.	2,501	57,026	500	22,890
Copper ore, tons .....	.....	1,715	.....	21,685
“ in matte, tons	14,057	16,989	2,024,658	6,285,930
Gold, ounces	281,712	363,955	5,826,941	7,513,734
Iron ore, tons	302,586	271,034	601,044	673,170
Molybdenite (concentrates), lbs. ....	.....	15,845	.....	15,845
Nickel, oxide, lbs.	142,483	5,152	16,085	6,381
“ metallic, lbs.	11,905	17,435	4,762	7,618
“ in matte, tons	24,054	31,046	5,369,536	15,523,000
Pig iron, tons	354,153	501,410	4,510,906	6,686,965
Silver, ounces	17,178,629	16,203,091	8,030,469	9,750,040

Cobalt.—The silver mines of the Cobalt district have definitely established their supremacy of the sources of the world's supply of this mineral. Notwithstanding the war, which has closed the European markets, the shipments of cobalt oxides were much greater, both in quantity and value than in the first nine months of 1915. It will be observed that metallic cobalt is assuming an important place in the list. This is mainly due to its use in the manufacture of special alloys, principally stellite, for high speed tools. Stellite is made of cobalt, chromium and tungsten, and is finding a good demand from munition makers and other workers of modern hard steels.

Copper.—The extraordinary rise in the price of copper, which averaged 27 cents per pound in New York during the nine months, has brought about the opening of several deposits of copper ore chiefly west of Lake Superior, from which shipments have been made to British Columbia smelters. The principal of these mines

is the Tip Top; another at Mine Centre has lately been sending forward to B. C. a carload of ore daily. The price received by the shippers has averaged 18.5 cents per pound for the copper contents. This figure has also been applied to the copper contained in the heavy shipments of matte from the Sudbury nickel-copper mines, and a considerable part of the increase in value of the copper reported is due to the higher valuation, although the quantity shipped was also greater by 20 per cent.

Gold.—The output from the mines of Northern Ontario is steadily increasing, being 28 per cent. in excess of that for the nine months of 1915. Hollinger Consolidated continues to be the chief producer, accounting for 47 per cent. of the total. Dome followed with 21 per cent., and McIntyre-Porcupine with 10 per cent. The other considerable contributors in this camp are Porcupine Crown, Schumacher, Vipond, and Jupiter, which together furnished 5.5 per cent. Outside of Porcupine proper, Tough-Oakes yielded \$519,149; Canadian Exploration, Croesus and a small output from Dome Lake amounted to over one-quarter of a million dollars. At Teck-Hughes (Kirkland Lake) the mine has been developed and a mill built which will be put in operation as soon as the power transmission line now being erected from Cobalt has been completed. Other prospects here, the Lake Shore, Wright-Hargrave, Kirkland Lake Gold Mines, La Belle-Kirkland and Sylvanite are also being developed. This is a promising camp. In Gauthier township the Huronian mine is being worked under a lease. Several discoveries of gold were made during the summer in Benoit township, but there has not been time to prove their value. At Tashota, the Tash-Orn Company has bought the Wells claim and has put in machinery to give it a thorough test. This company is also working the King-Dodds claims. A diamond drill has been operated on the Devanney, Reamsbottom and Clive claims.

Molybdenite.—There is a demand in Britain for making tool-steel, and several deposits of the ore in Eastern Ontario have been opened and are being worked. There are dressing plants at Renfrew and Ottawa, the latter operated by the Dominion Mines Department. Ferro-molybdenum is also being made at Orillia and Belleville. The supply of molybdenite throughout the British Empire has been reserved as a war measure and a price of 105 shillings per unit fixed for concentrates delivered at Liverpool. This approximates \$1.00 per pound here.

Nickel.—The Canadian Copper Company and the Mond Nickel Company have been working their mines and smelters at maximum capacity, and the output of nickel, contained in the matte product of the furnaces, for the nine months falls little short of that for the full year 1915. The production for 1916 will probably exceed the production of 1915 by 20 per cent. The valuation of the nickel in the matte has been increased from about 11 cents per pound (the figure adopted by the mining companies) in 1915 to 25 cents per pound in 1916. Nickel refineries are to be erected in Ontario by the International Nickel Company and the British American Nickel Corporation, the latter of which is developing the Murray mine. Small quantities of metallic nickel are being produced from Cobalt ores by the Deloro Smelting and Refining Company.

Iron.—The whole production of iron ore was from the Helen and Magpie mines of the Algoma Steel Corporation. At the latter the ore (siderite) is roasted previous to shipment. Four blast furnace companies at Port Colborne, Sault Ste

Marie, Deseronto and Hamilton, respectively, produced pig iron in quantity 41 per cent., and in value 48 per cent. greater than in the corresponding period of 1915.

Silver.—The mines at Cobalt continue to produce, though on a slowly diminishing scale. The number of fine ounces contained in the shipments of the nine months was 975,538 below the record for the same period of last year, but owing to the much higher prices that have prevailed for silver the return of the mining companies was \$1,719,571 greater. Silver started the year at 56.76 cents per ounce and rose to a maximum in May of 74.27 cents, when it receded to 63.06 in July, reaching 68.51 cents again in September. In 1915, the monthly average was 49.75 cents per ounce. Nipissing still leads in production, Mining Corporation coming next, followed by Kerr Lake, Coniagas, McKinley-Darragh-Savage, Seneca-Superior, Temiskaming, etc. The flotation process is likely to assist materially in increasing the production of silver at Cobalt. It has been introduced at the Buffalo mine, where it is treating successfully low-grade tailings containing 5 or 6 ounces per ton. From the gold ores treated during the period 66,347 ounces of silver were obtained, and from the copper ores 607 ounces.

COLLECTIONS.

The total revenue of the Department from all sources was \$1,860,557.37. Of this \$83,555.03 came from agricultural lands and town sites; mining lands \$36,578.69; mining and crown leases \$66,974.79; miners' licenses, permits and recording fees \$66,906.98; royalties \$15,083.52; supplementary revenue tax \$186,827.12. From woods and forests the revenue was \$1,335,320.78 made up of the following items, bonus \$419,827.94; timber dues \$822,332.81; ground rent \$89,520.03; transfer fees \$3,640.00. (See Appendix No. 4, page 9.)

DISBURSEMENTS.

The total expenditure of the Department for ordinary services was \$627,347.95. Some of the principal items were: Agents' salaries and disbursements \$17,251.77; homestead inspectors \$12,593.23; Crown timber agents \$29,402.13; wood ranging and estimation of timber \$166,197.58; fire ranging \$111,118.20; forest reserves, fire ranging, etc., Temagami reserve \$37,789.21, Metagami reserve \$7,936.76; Mississauga reserve \$18,722.89; Nipigon reserve \$18,881.24; Eastern reserve \$2,804.68; Sibley reserve \$832.50; mines and mining \$51,524.01; mining recorders \$24,000.43; surveys \$63,884.33; contingencies, lands and forests \$28,679.47; bureau of mines \$12,085.06.

A further sum of \$111,171.05 was expended under the direction of the Department, distributed as follows: Algonquin Park \$35,473.13; Quetico Provincial Park \$11,268.87; expenditures under Bounty Act, 7 Edward VII, cap. 14, \$25,550.91; Veteran's Commutation \$600.00; Royal Nickel Commission \$37,578.14. (See Appendices Nos. 6 and 7, pages 11 and 33.)

WOODS AND FORESTS.

The revenue accrued from woods and forests for the year ending 31st October, 1916, was \$1,405,425.06, which was \$224,224.54 less than that of the preceding year.

The revenue collected amounted to \$1,335,320.78, a decrease of \$192,784.04, as compared with the year ending 31st October, 1915.

This decrease is directly attributable to the war. The number of men enlisting for overseas service rendered it difficult for the lumber companies to properly man their camps, and the cessation to a very great extent of building operations greatly lessened the demand for lumber.

In only one respect did the quantity taken out compare with that of the previous season, 738,597 railway ties being taken out, which was 9,433 in excess of the number for 1914-15.

The production of pine timber, saw logs, square timber, etc., was 307,826,365 feet board measure, a decrease of 100,000,000 feet board measure from quantity produced last year. Timber other than pine also shows a considerable falling off, 38,906,200 feet board measure being taken out as against 59,308,403 feet board measure for season 1914-15.

The quantity of pulpwood taken off Crown lands was 169,513 cords, or 131,443 cords less than last season, but nearly 65,000 cords more than was cut during season 1913-14.

There is already apparent an increased demand for nearly all classes of timber, and the output for 1917 it is confidently expected will show a substantial increase over that for the past season.

The shortage of cars and consequent difficulty in securing coal has greatly increased the demand for cordwood for fuel purposes, and this will enable settlers to derive considerable revenue from the wood upon their lands.

The available supply of pulpwood in the United States is nearly exhausted and this has led to constant inquiries being made with respect to pulp bearing lands in the Province of Ontario. Inquiries have been received from several European countries as well as from all sections of the Republic to the south.

Two areas have recently been offered for sale by public competition. These areas are known as the Pic River Pulp and Timber Limit and the Black Sturgeon Pulp and Timber Limit.

The pulp companies already in operation have recently added additional units to their plant and are prepared to purchase from settlers in order to insure sufficient pulpwood for their mill.

SOURCES OF REVENUE.

The \$1,355,320.78 collected during the year ending October 31st, 1916, was made up as follows:

Timber Dues	\$822,332 81
Bonus.....	337,972 94
Ground Rent.....	89,520 03
Transfer Fee.....	3,640 00
Deposit on Timber Sales.....	81,855 00

\$1,355,320 78

LANDS UNDER LICENSE.

The area under license last year was 15,712 $\frac{1}{4}$ square miles, which is one-half square mile more than the area under license the previous year, that is to say, the new licenses issued represent an area equal in extent to the sum of the areas dropped from license.

The area under license varies from year to year for the following reasons:

1. License does not issue because of the failure of the licensee to pay timber dues owing on timber cut under authority of a license.
2. Nonpayment of ground rent.
3. Areas that have been cut over are dropped from the license.

CULLERS' EXAMINATIONS.

Two Cullers' Examinations were held during the year, one at North Bay and one at Kenora. Six candidates succeeded in passing the examination and were duly granted certificates authorizing them to act as Cullers.

(For complete list of licensed cullers see Appendix 12, page 38.)

ONTARIO PULP WOOD INDUSTRY.

The wood used in the manufacture of pulp has shown substantial increases in the Province. The 1913 production was worth \$4,107,689, increasing in 1914 to a value of \$4,148,405, and keeping ahead of the four million mark in 1915 with a production worth, approximately, \$4,500,000. The production of wood used in the manufacture of pulp in three years in the Province of Ontario produced a value of, approximately, \$12,500,000. While five of our Provinces contributed to the output of pulpwood in 1915 over 50 per cent. of the total Canadian production was in this Province.

The newspaper industry is occupying the centre of the stage and is consequently responsible for the great activity in the pulp mills of the Province. While no complete statistics have been gathered to trace with real certainty the cause of high prices the unprecedented demand for paper continues to raise prices to the small consumers which seems to indicate the existence of an actual shortage. The mills are unable to promise dates of delivery and are not taking orders for months ahead.

ONTARIO PULP WOOD PRODUCTION.

The following chart shows the value of the wood used in the manufacture of pulp and paper in the Province of Ontario, also the pulp produced, in accompanying table:

1912,	Tons	173,903,	Value	\$1,235,343
1913,	Tons	321,244,	"	2,297,389
1914,	Tons	477,751,	"	3,172,235
1915,	Estimate	500,000,	"	4,200,000

FIRE RANGING.

During the month of May and first three weeks of June, 1916, rain fell almost daily. So much water fell during this period that the ground was thoroughly saturated and no danger from fire was possible, but the last week of June the

weather became extremely hot and intense heat prevailed all through July and for the greater part of August, causing everything to become dry as tinder. The settlers who had been prevented by the frequent rain from burning the brush now availed themselves of the changed conditions and began to set out fires to clear their lands. For a couple of weeks all went well, but during the last few days of July violent winds sprung up in the Temiskaming district, fanning the individual fires, driving them beyond control, uniting them into one seething caldron of flame. The loss of life and damage to property makes this the most terrible and deplorable fire in the history of the Province. A more detailed account of this fire will be found elsewhere in this report.

In the early part of August fires were reported from almost every part of Northern Ontario, but in no other case were they attended by loss of life. Although some valuable timber was damaged in different sections of the Province, for the most part the fires were kept confined to certain well defined areas by the well directed efforts of the ranging staff. Too much credit cannot be given to the men who in some cases kept up the fight for several days and nights, and finally found their efforts crowned by success.

The fires occasioning the greatest damage to timber were in the townships of Gooderham, Notman, Janes, Dana, McNeish, Pardoe, Cotton, Howey, Grigg, Beardsford, Sweeney, Frechette and Valin.

Where the damaged area was under license the timber damaged by fire will be cut and removed by the licensee this season.

Where the areas were not already under license sales were affected, the purchasers agreeing to remove the damaged timber this winter. The prices obtained for the damaged timber in these sales were better than might reasonably have been anticipated.

Some 1,804 fires in all were reported during the season, but only in the case of 125 were they attended by any damage to timber, the balance being put out by the rangers before they had an opportunity to spread.

Nearly 50 per cent of the fires were said to be caused by railway engines, but very few of these fires occasioned any damage. It is only fair to state that the railways are co-operating whole-heartedly with the Department in its efforts for the protection of the forests wealth of the Province.

Next to the railway engines the cause of the greatest number of fires is given as settlers clearing lands. These fires occasion the greatest damage as the clearing is generally contiguous to standing timber and plenty of material is at hand to feed the flames and cause them to spread. The other causes of fires given are lightning, campers, berry pickers, tourists, smokers and road construction.

There were 474 men on duty on Crown Lands during the fire ranging season of 1916, distributed as follows:

Forest reserves, 186; railways, 127; Crown Lands, 115. These men were under the direct supervision of 19 chief rangers and 7 deputy chief rangers. There were also 12 inspectors on railways, 8 supervisors on lands under license.

FOREST RESERVES.

Temagami Forest Reserve was patrolled by 113 rangers last season, under the direction of four chief rangers and one deputy.

Missassaga Reserve had a staff of 48 rangers under the supervision of a chief ranger and three deputies.

Nepigon Reserve had 17 rangers on duty under one chief. There were in addition a staff of 17 men in the Kowkash Mining District.

Eastern and Sibley Reserves had the usual staff of rangers.

The cost of patrol in the forest reserves was \$86,966.78.

RAILWAYS.

One hundred and twenty-seven men under six chief rangers and a deputy chief ranger patrolled the T. & N. O. and Canadian Government railways, there being 62 on the T. & N. O. and 65 on the Transcontinental, including 8 men on the Superior Junction branch.

All other railways were under the jurisdiction of the Dominion Railway Board and were responsible for fire protection along their lines. The Department appointed 12 inspectors to see that the regulations of the Board were carried out. The cost of railway patrol was \$60,274.00. The cost of fire ranging on Crown Lands other than railways and reserves was \$50,842.22.

The number of rangers on licensed lands was 290. The approximate cost of fire ranging would be \$75,000.00. This is borne by the licensees who are responsible for fire protection in connection with their limits.

SUMMARY OF COST

Cost of Patrol, Railways and Crown Lands	\$111,118 23
“ “ Forest Reserves	86,966 78
“ “ Licenses Lands (Approximate).....	<hr/> \$198,085 00
	75,000 00

The rangers on railways are furnished with velocipedes, 73 being in use last season, 3 of them motor speeders. Canoes are provided for rangers in the reserves and wherever their use could be of any assistance. Seven gasoline launches were used in the fire protection service, and on one of them the Department, last season, installed a pump which rendered excellent service.

The different fire ranging camps in the Nepigon Forest Reserve are connected with each other and with headquarters by telephone, some 125 miles of phone service being in operation. This phone service has been in operation several seasons and has proved of great value, fully justifying the expense incurred in its establishment.

FOREST FIRES IN JULY-AUGUST.

On the 29th of July last, and the week following, a very destructive forest fire swept over the country in the vicinity of Matheson and Cochrane. It extended in a north-westerly direction along the Temiskaming and Northern Ontario Railway, through the townships of Bowman, Carr, Taylor, Walker, and part of Clergue, to Iroquois Falls Jct., and easterly, north-easterly and southerly through the townships of Hislop, Beatty, Munro, and other townships in part to the Abitibi river.

The fire destroyed nearly all the culverts, corduroy roads and small bridges built in previous years on the territory swept over, and several of the large bridges.

The fire extended easterly along the Porcupine Branch of the T. & N. O. Rly. to the Abitibi river, burning practically everything in its course—settlers' homes

and crops, part of the plant of the Abitibi Pulp and Paper Co., and part of the town of Iroquois Falls.

The weather for three weeks previous to the 29th of July had been extremely hot and dry, with high winds. The fire started at almost every point of the compass—in the settlers' clearings, and cut over pulp lands—in many places started from unknown causes, in most instances, however, where settlers had been burning off new clearings. The townships around Matheson, although partly burned over on three previous occasions, were again fire swept. Farm buildings and crops were completely destroyed, but the saddest part of all was the great loss of life. The fires and storms of previous years had levelled down the large timber, forming wind-falls around the swamps. The flames swept from one farm clearing to another; fields of grain and swamps formed no barriers or protection. Township after town-



The Town of Matheson after the fire of July, 1916.

ship was burned over and even the virgin forest in places was left practically ready for the plow.

This fire burned on both sides of the T. & N. O. Rly., from Ramore, south to Matheson, north to Porquois Jct., and on both banks of the Black river, completely destroying the villages of Kelso, Nushka, part of Porquois Jct., part of Iroquois Falls, the town of Matheson, the business part of Cochrane, and nearly all the culverts, corduroy and small bridges on the trunk roads.

While this fire was burning a fire of less magnitude was burning around the town of Cochrane. It started near the south-west end of the town where settlers had been burning off their old fallows a few days previous. Every effort was made by the citizens of Cochrane and the fire brigade to extinguish this fire, but without avail. The business portion of the town was completely destroyed. The fire, however, did not extend far beyond the limits of the town. Numerous small fires

started at different points from unknown causes—chiefly, however, from settlers burning off their fallows—extended as far west along the Grand Trunk Pacific Rly. as the Frederickhouse river, as far east as the Abitibi river, and north about ten miles through part of the townships of Glackmeyer and Clute. Beyond the limits of the town of Cochrane a large number of settlers lost their buildings and crops; nearly all the culverts, corduroy roads and small bridges were burned. These fires swept over the country with great energy; it was almost impossible to save buildings or crops. The dry moss on the partially cleared lands and the debris left by the settlers when taking out pulpwood, carried the fires from point to point. Ten persons were burned to death a few miles north of Cochrane when attempting to reach a small lake.

Fires were started at different points along the Transcontinental as far west as



View of the fire-swept territory near Matheson the day following the fire, July, 1916.

Hearst (130 miles from Cochrane), started in most instances from settlers clearing their land. Several homesteads were burned out but no lives lost. These fires cleared up large areas of land and were in many instances of very great assistance to the settlers. Clearings were made which would have taken the settlers years to accomplish. In the vicinity of Hearst, along the line of railway, several culverts and small bridges were burned on roads lately constructed by this branch. As soon as the fire passed over immediate steps were taken to replace the culverts and bridges and remove the burned corduroy and regrade the roads.

In the vicinity of Matheson and Cochrane much of the available timber suitable for culverts and bridges was destroyed. Corrugated iron culverts had to be secured; one hundred of these have already been put in places and several of the smaller bridges on the more important roads renewed.

The store-houses and office of the Northern Development Branch were completely destroyed at Matheson, also part of the plant; the same at Cochrane with the exception of the office. Fortunately most of the plant was in use at the different outside camps and was not destroyed. The buildings were insured and the loss is not very great.

It will take some time, however, to put these roads in as good condition as they were before the fire. The fire, while it has destroyed many miles of corduroy road, will greatly assist in drainage in the future, having burnt off the moss on the surface which held the frost in the early spring. In this respect it will greatly improve the climatic conditions of the country besides clearing the land.

The intense heat and strong winds the last few days of July made it almost impossible to extinguish the settlers' fires, which had been burning for several days previous. Large sections of country in places have been almost completely denuded of timber and made ready for the plow. The total area burned over has, however, been much exaggerated.

This fire, had it not been for the tremendous loss of life, would not compare in magnitude with many fires that have taken place in the Province within the last fifty years. The fire of 1864, and later in '71, along the north shore of Lakes Superior and Huron, and that of '77 in the Parry Sound district, and that of '91 and '96 in the pine country west and north-west of Sudbury, were far more destructive from a financial standpoint than the recent fire at Matheson and Cochrane. Each covered a much greater area and destroyed greater values in timber. A much later fire, that of 1894, which swept over a large section of Northern Minnesota and crossed the Rainy river into the Rainy river Valley at Boudet, in which fire 140 lives were lost, six of them in the Rainy River Valley, it swept over several townships in the valley. This fire was in many respects similar to the Matheson and Cochrane fire; the country swept over was low and swampy, and at that time considered unfit for settlement. Much of it is now under cultivation and is considered one of the best agricultural sections in Northern Ontario.

Previous to and during the fire every assistance was given by the employees of the Northern Development Branch and other officials of the Department in putting out fires along the newly constructed roads. No further action on the part of the Government could have saved the situation. Owing to wet weather in previous seasons the settlers had been unable to clear off their land and were anxious to take advantage of every possible opportunity of clearing their lands when the weather was dry, as very little could be accomplished in clearing land of a character similar to that in the Clay Belt except in the dry season.

COLONIZATION.

One of the many important changes made by the Government was the transfer of the Colonization Branch from the Department of Agriculture to this Department.

The work of the Branch is largely that of promoting and directing settlement, although it has been successful, in recent years, in bringing a large number of domestic servants and farm labourers to Ontario.

Settlement in Northern Ontario has been almost completely arrested by the war, and the drain of men from farms and industries has rendered an acute labour situation.

It was foreseen that this was inevitable and will continue until the war is over and the men are released at the front. To prepare for this time and ensure that Ontario will receive a fair proportion of the exodus after the war is a problem to which the Colonization Branch is devoting careful and expert study.

For particulars and report of the colonization and immigration during the year see Appendix 35, page 103.

CROWN SURVEYS.

The following Crown Surveys have been completed during this year:

Township of Owens, district of Timiskaming.

Township of Cody, district of Timiskaming.

Township of Forbes, district of Thunder Bay.

Township of Colenso, district of Kenora.

Township of Nepigon, additional, district of Thunder Bay.

Township of Hele, district of Thunder Bay.

Parts of townships of Hall, Joffre, Carew and Cavell, district of Sudbury.

Addition to the townships of Ware and Gorham, district of Thunder Bay.

Town plots of Grant and Armstrong, district of Thunder Bay.

Survey of tie line Kowkash Mining Division, district of Thunder Bay.

Survey and traverse of Lady Evelyn lake and islands, district of Timiskaming.

Survey and traverse of Peter Long lake, district of Timiskaming.

Survey of timber berths K 23 and 23a, district of Kenora.

Survey of part of Peninsula No. 2, township of Bosanquet, county of Lambton.

See Appendix No. 15, page 56.

For Crown Surveys in progress see Appendix No. 16, page 57.

MUNICIPAL SURVEYS.

Three municipalities petitioned for surveys and instructions were given authorizing the same. Several municipal surveys were confirmed during the year under R.S.O. Cap. 166, Sections 13 and 14, such surveys being final and conclusive.

Particulars relating to these will be found in appendices No. 17 and No. 18, pages No. 58 and No. 59.

The survey of Georgian Bay Islands was completed this year and the reports show that there are some 15,000 islands embraced within this territory. These islands have been placed in the market for disposal at a minimum charge of \$10 per acre, together with a charge of \$25 to cover cost of departmental survey.

To avoid speculation purchasers are required to expend \$300 in improvements within eighteen months from date of sale. The accessibility to these islands by boat or launch has rendered them attractive to tourists.

FILING SYSTEM.

The rapid increase in the volume of correspondence received and dispatched by the Department made it necessary to install a more efficient filing system. On January 1st, 1916, a complete change was effected.

Prior to this date the Department had used the "Folded" or "Document" system. This was found cumbersome, slow and entirely inadequate to meet the requirements of the Department. The files were kept in vaults in the various

branches and considerable time was found to be consumed in locating the various files.

After several months careful consideration and investigation it was decided to adopt the "Vertical" or "Flat File" system, and concentrate the files in one general filing room. These changes have all been effected and are working smoothly and satisfactorily.

For volume of correspondence handled by Record Branch see Appendix No. 13, page No. 50.

G. H. FERGUSON,
Minister.

Department of Lands, Forests and Mines,
Toronto, October 31st, 1916.

APPENDICES

Appendix No. 1.

Return of Officers and Clerks of the Department of Lands, Forests and Mines for the year ending October 31st, 1916.

Branch.	Name.	Designation.	When Appointed.	Salary per annum.	Remarks.
	Hon. G. H. Ferguson	Minister	1914, Dec. 22	\$ c. 6,000 00	
	Albert Grigg	Deputy Minister	1915, Oct. 13	3,600 00	
	Geo. Kennedy	Law Clerk	1872, Feb. 1	2,900 00	Died June 16, 1916.
	C. C. Hele	Minister's Secretary and Secretary to Department	1912, Jan. 23	2,500 00	
	J. Farrington	Clerk	1916, Jan. 6	1,200 00	
	A. G. Thompson	do	1909, Mar. 24	825 00	
	M. Johnston	Stenographer	1915, Oct. 9	650 00	
	J. J. Murphy	Advisory Chief Clerk	1872, May 1	2,300 00	
	W. C. Cain	Chief Clerk	1903, Mar. 6	1,900 00	
	H. E. Johnston	Clerk of Military Grants	1907, Mar. 13	1,600 00	
	W. R. Ledger	Clerk of Sales	1894, Feb. 5	1,450 00	
	S. Draper	Clerk of Free grants	1903, Jan. 1	1,350 00	
	S. A. Platt	Clerk	1907, Mar. 13	1,100 00	
	F. Lucas	do	1909, Mar. 24	1,100 00	
	J. E. Drinkwater	do	1916, May 3	950 00	
	N. MacQueen	Stenographer	1909, Mar. 24	725 00	
	M. Bengough	do	1896, Oct. 23	750 00	
	J. C. Oram	do	1907, Jan. 16	725 00	
	E. F. O'Neil	do	1904, Nov. 9	725 00	
	E. G. Halliday	do	1909, Mar. 24	725 00	
	B. M. Benson	do	1911, Mar. 3	625 00	
	E. Hills	do	1916, May 3	600 00	
	G. B. Kirkpatrick	Director	1866, Jan. 30	2,700 00	
	L. V. Rorke	Assistant Director	1909, May 5	2,600 00	
	J. Hutcheon	Surveyor and Draughtsman	1913, May 20	2,150 00	
	W. F. Lewis	Clerk	1872, Feb. 5	1,400 00	
	D. G. Boyd	Draughtsman	1897, Sept. 27	1,650 00	
	E. M. Jarvis	Clerk	1904, Oct. 19	1,400 00	
	J. B. Proctor	do	1897, Jan. 15	1,200 00	
	B. Rushford	Draughtsman	1912, Oct. 5	1,000 00	
	F. E. Blanchet	Clerk	1907, Mar. 13	1,100 00	
	A. Leaman	do	1909, Mar. 24	1,100 00	
Lands Branch					
Surveys and Patents					

Surveys and Patents	H. Treby	Draughtsman	1904, Jan. 13.....	1,250 00
	J. Work	do	1911, Mar. 3.....	1,250 00
	H. M. Kirkland	Stenographer	1904, Nov. 23.....	725 00
	C. O'Connor	do	1911, Mar. 3.....	625 00
	E. C. Arner	do	1911, Mar. 3.....	625 00
	C. S. Jones	Clerk of Patents	1890, May 22.....	2,050 00
	W. S. Sutherland	Engrossing Clerk	1902, Jan. 13.....	1,350 00
	C. E. Burns	Reference Clerk	1900, Apr. 9.....	1,450 00
	W. Carrell	Engrossing Clerk	1904, Jan. 15.....	1,250 00
	A. E. Robillard	do	1894, May 8.....	1,000 00
Woods and Forests	A. E. Roe	Clerk of Registers	1909, Mar. 24.....	1,250 00
	J. A. G. Crozier	Advisory Chief Clerk	1867, Dec. 1.....	2,300 00
	J. Houser	Chief Clerk	1907, Mar. 13.....	1,800 00
	J. B. Cook	Clerk	1898, Aug. 1.....	1,750 00
	H. Gillard	do	1900, Apr. 9.....	1,500 00
	F. J. Niven	do	1903, Mar. 6.....	1,350 00
	W. F. Trivett	do	1904, Jan. 13.....	1,300 00
	R. H. Hodgson	do	1904, Nov. 23.....	1,200 00
	A. H. O'Neil	do	1909, Mar. 24.....	1,000 00
	G. W. Harris	do	1909, Mar. 24.....	1,000 00
Accounts	N. L. Rogers	do	1911, Nov. 2.....	1,050 00
	S. D. Meeking	do	1910, May 12.....	900 00
	E. H. Squires	do	1916, Apr. 6.....	960 00
	E. H. Telfer	do	1916, Apr. 6.....	800 00
	C. Rowland	Stenographer	1915, Mar. 23.....	700 00
	W. A. Fleming	do	1915, Feb. 16.....	600 00
	M. E. Bliss	do	1909, Sep. 1.....	775 00
	H. Canton	do	1915, Oct. 9.....	625 00
	D. G. Ross	Accountant	1861, Apr. 15.....	2,550 00
	H. M. Lount	Clerk	1904, Jan. 13.....	1,550 00
Forestry	C. J. Clarke	do	1907, Mar. 13.....	1,150 00
	R. Gordon	do	1913, Apr. 30.....	850 00
	W. A. Burritt	do	1908, Apr. 8.....	1,150 00
	C. Bowland	Clerk and Stenographer	1911, Mar. 3.....	700 00
	F. Yeigh	Registrar	1880, Mar. 1.....	1,600 00
	E. J. Zavitz	Director	1912, Nov. 7.....	2,600 00
	F. S. Newman	Assistant Director	1913, Sep. 22.....	1,600 00
	J. Bald	Stenographer	1914, Oct. 28.....	600 00
			Resigned Aug. 1, 1916.	

Appendix No. 1.—Concluded.

Return of Officers and Clerks of the Department of Lands, Forests and Mines for the year ending October 31st, 1916.

Branch.	Name.	Designation.	When appointed.	Salary per annum.	Remarks.
Colonization	H. A. Macdonell	Director	1912, Feb.	\$ 2,350 00	
	John Argue	Clerk	1908, Apr.	1,500 00	
	R. A. Jones	do	1909, Mar.	1,400 00	
	C. W. Garthwaite	do	1910, Nov.	1,100 00	
	H. Tutt	do	1911, Mar.	1,000 00	
	S. O. Dennis	Clerk and Stenographer	1910, Nov.	700 00	
	R. Duggan	Stenographer	1910, Feb.	725 00	
	F. R. Dunlop	do	1912, Dec.	650 00	
Record Branch	B. McDonald	do	1911, Mar.	700 00	
	S. K. Burdin	Chief Clerk	1916, Apr.	2,300 00	
	C. Dies	Clerk	1907, Mar.	1,250 00	
	A. P. Saunders	do	1913, Apr.	1,000 00	
	C. W. St. John	do	1910, Apr.	1,000 00	
	A. Ferguson	do	1916, Apr.	960 00	
	W. B. Baines	do	1912, Oct.	950 00	
	F. Samuels	do	1909, Mar.	925 00	
Bureau of Mines	H. Brophy	Mailing Clerk	1898, Oct.	1,000 00	
	T. W. Gibson	Deputy Minister	1891, June	4,000 00	
	R. D. Fisher	Secretary	1907, Mar.	1,350 00	
	D. H. Barr	Clerk	1907, Mar.	1,150 00	
	F. L. Godson	do	1915, June	900 00	
	W. Lemoine	do	1908, Apr.	1,150 00	
	Anne Moffatt	do	1901, Mar.	1,100 00	
	A. G. Scovell	do	1909, Mar.	1,050 00	
	Ethel Craig	Clerk and Stenographer	1906, May	800 00	
	F. McDougall	do	1907, Mar.	725 00	
	J. L. McNaughton	do	1909, Mar.	750 00	
	H. W. Batchelor	Stenographer	1911, Dec.	650 00	

D. GEO. ROSS,
Accountant.ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 2.

List of Agents for the year ending October 31st, 1916.

Name.	Post office address	District or County.	Date of appointment.	Salary per annum.	Remarks.
<i>Land Agents.</i>					
Anderson, T. V.	Hearst	Part District of Algoma	1913, May	9	\$ c.
Arthurs, E.	Espanola Mills.	do do	1915, May	7	500 00
Baker, R. H.	Minden	Part of Victoria	1907, Oct.	1	200 00
Bolger, J. W.	New Liskeard	Lake Temiskaming, District of Nipissing.	1913, July	17	350 00
Both, C.	Denbigh	Part of Frontenac and Addington	1905, Oct.	20	700 00
Brown, John	Markstay	Part of District of Nipissing and Sudbury.	1916, June	27	200 00
Burrows, W. A.	Port Arthur	Part District of Thunder Bay	1912, Jan.	30	500 00
Byers, R. J.	Massey	do do Sudbury	1905, July	3	700 00
Cameron, W.	Stratton Station.	do do Rainy River	1911, April	27	500 00
Campbell, I. M.	Parry Sound.	do do Parry Sound	1914, Nov.	12	500 00
Dempsey, S. J.	Cochrane	do do Nipissing	1911, Feb.	9	600 00
Dodds, T.	Thessalon	do do Algoma	1915, May	4	300 00
Douglas, W. J.	Greenview	do Hastings	1912, June	12	500 00
Ellis, H. J.	Powassan	Part District of Parry Sound	1909, May	21	500 00
Fletcher, H. H.	Massey	do do Sudbury	1916, May	3	500 00
Freeborn, Dr. J. S.	Magnetawan	do do Parry Sound	1905, Nov.	10	500 00
Gibson, J. E.	Dryden	District of Rainy River	1914, Nov.	20	500 00
Ginn, F. E.	Matheson	Part District of Nipissing	1912, Mar.	20	600 00
Hales, W.	Apsley	do County of Peterborough	1911, July	20	250 00
Hollands, C. J.	Fort Frances.	Part Township of Alberta and part District of Rainy River	1892, Oct.	12	300 00
Jenkin, W.	Emsdale	Part District of Parry Sound	1908, July	29	500 00
Langlois, E.	Warren	do do Sudbury	1911, April	4	500 00
Lenieux, J. A.	Bleazard Valley ..	do do do	1908, June	26	400 00
McFayden, A.	Emo	do do Rainy River	1905, Sept.	8	500 00
MacLennan, J. K.	Sudbury	do do Sudbury	1905, July	3	500 00
Noble, E.	Sault-Ste. Marie.	do do Algoma	1913, Feb.	1	300 00
Parsons, W. J.	North Bay	do do do	1908, April	8	500 00
Phillon, J. A.	Sturgeon Falls.	do do Nipissing	1907, Sept.	13	500 00
Prince, A.	Wilno.	Part of Renfrew	1905, July	12	500 00
					Removed June 14th, 1916.
					Resigned July 31st, 1916.

Appendix No. 2.—Concluded.

List of Agents for the year ending October 31st 1916.—Continued.

Name.	Post office address	District or county.	Date of appointment.	Salary per annum.	Remarks.
Land Agents—Continued.					
Small, R.	Mattawa	Part District of Nipissing	1910, June 30	\$ 500 00	Also Mining Recorder.
Spry, W. L.	Kenora	do Rainy River	1909, Sept. 21	400 00	
Watt, F.	Pembroke	Part of Renfrew	1913, May 28	300 00	
Whybourne, W. E.	Marksville	Part of St. Joseph Island	1906, April 7	250 00	
Wilson, A. N.	Kinmount	Part of Peterborough	1915, June 1	175 00	
Woollings, J.	Englehart	Part of District of Nipissing	1908, June 30	600 00	
Homestead Inspectors.					
Barr, J.	Fort Frances.	District of Rainy River	1906, Nov. 23	1,200 00	Also Crown Land Agent.
Bastien, J. A.	Chelmsford	W. Part of Sudbury District	1913, May 2	600 00	
Brown, J. B.	Bracebridge	Muskoka District	1905, July 28	1,000 00	
Burnes, C. W.	Sundridge	Parry Sound District	1905, Nov. 15	900 00	
Cragg, W. V.	New Liskeard	S. Part of Temiskaming District	1913, Mar. 27	1,200 00	
Dean, T.	Sault Ste. Marie.	Algoma District	1908, July 29	600 00	
Hughes, T.	Murillo	Thunder Bay District	1908, July 20	800 00	
Poole, E. G.	Porquis Jct.	Part Temiskaming District	1908, July 20	800 00	
Quenneville, I.	Sturgeon Falls.	E. Part Sudbury and W. Part Algoma Districts	1916, Sept. 12	1,200 00	
Smith, D.	Cochrane	N. Part Temiskaming District	1906, May 7	600 00	
Watson, T. P.	Englehart	Centre Part of Temiskaming district	1912, April 16	1,000 00	
Wigle, R. G.	Dryden	Kenora District	1905, May 10	1,000 00	
			1914, May 27	1,000 00	
Timber Agents.					
Bremner, G.	Cochrane	Part Temiskaming and Algoma Districts	1913, May 20	1,300 00	
Christie, W. P.	Parry Sound	Part Parry Sound and Muskoka Districts ..	1903, Dec. 4	1,600 00	
Darby, E. J.	Ottawa	Part Ottawa District	1889, July 26	1,500 00	
Hawkins, S. J.	Webbwood	Part Algoma and Sudbury Districts	1905, Aug. 16	1,500 00	
Henderson, C.	Sudbury	do	1902, Jan. 1	1,800 00	
Johnson, S. M.	Arnprior	Part Ottawa and Parry Sound Districts ...	1907, Jan. 11	1,600 00	
MacDonald, S. C. ...	New Liskeard.	Part Temiskaming District	1910, Sept. 27	1,600 00	

		\$	c.	Died	October 26th, 1916.
Margach, W.	Kenora	1889,	May	16	1,600 00
Maughan, J.	Sault Ste. Marie..	1903,	Dec.	9	1,500 00
McDonald, H.	Thessalon	1905,	April	20	1,500 00
McDougall, J. T.	North Bay.....	1908,	July	8	1,600 00
Oliver, J. A.	Port Arthur.....	1905,	Sept.	30	1,500 00
Stevenson, A.	Peterborough ..	1905,	Oct.	4	1,500 00
Watts, G.	Fort Frances....	1910,	April	19	1,500 00
<i>Mining Recorders.</i>					
Browning, A. J.	Elk Lake.....	1913,	July	15	1,100 00
Campbell, C. A.	Sudbury	1910,	Jan.	6	900 00
Gauthier, G. H.	Porcupine Mining Division	1912,	July	16	1,500 00
Hough, J. A.	Larder Lake Mining Division	1907,	May	22	1,200 00
Miller, N.	Matheson	1915,	June	9	1,000 00
Morgan, J. W.	Sault Ste. Marie Mining Division	1906,	Dec.	28	1,000 00
Morgan, M. R.	Port Arthur.....	1916,	Mar.	10	900 00
McAulay, N. J.	Kowkash Mining Division	1915,	May	8	1,800 00
McQuire, H. F.	Temiskaming Mining Division	1906,	Sept.	26	500 00
Sheppard, H. E.	Parry Sound Mining Division	1909,	Feb.	10	1,000 00
Skill, A.	Gowganda Mining Division	1909,	April	1	1,200 00
Spry, W. L.	Montreal River Mining Division	1909,	Sept.	21	750 00
	Kenora Mining Division				
<i>Emigration Agents.</i>					
Reid, R.	England	1913,	Feb.	7	5,000 00
Clark, J. M.	do	1913,	Mar.	17	1,800 00
Thompson, J.	do	1906,	Jan.	24	1,800 00

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

D. GEO. ROSS,
Accountant.

Appendix No. 3.

Statement of Lands Sold and Leased. Amount of Sales and Leases and Amount of Collections
for the year ending October 31st, 1916.

Service.	Acres sold and leased.	Amount of sales and leases.	Collection on sales and leases.
<i>Lands Sold:</i>		\$ c.	\$ c
Agricultural and Townsites.....	98,209.02	66,815 98	83,533 03
Mining	14,592.11	37,756 28	36,457 56
University Mining	80.75	242 26	121 13
Clergy			1,692 32
Common School	50 00	70 00	3,760 48
University	2,967.50	1,483 75	1,518 51
<i>Lands Leased:</i>			
Mining	5,858.04	5,858 04	16,218 36
Crown	11,689 59	1,170 87	50,756 43
	133,447.01	\$113,397 18	\$194,057 82

D. GEO. ROSS,
Accountant.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 4.

Statement of Revenue of the Department of Lands, Forests and Mines for the year ending October 31st, 1916.

Service.	c.	\$ c.	\$ c
LAND COLLECTIONS.			
<i>Crown Lands:</i>			
Agricultural.....	79,598 75		
Townsites	3,934 28	83,533 03	
Mining Sales	36,457 56		
University Mining Sales	121 13	36,578 69	
		120,111 72	
Clergy Lands	1,692 32		
Common School Lands	3,760 48		
University Lands	1,518 51	6,971 31	
Mining Leases	16,218 36		
Crown Leases	50,756 43	66,974 79	
Miners' Licenses	27,264 75		
Permits	960 00		
Recording Fees	38,682 23	66,906 98	
Royalties.....		15,083 52	
<i>Supplementary Revenue:</i>			
Acreage Tax	12,637 38		
Profit Tax	140,559 60		
Gas Tax	33,650 14	186,827 12	
			462,875 44
WOODS AND FORESTS.			
Bonus.....		419,827 94	
Timber Dues		822,332 81	
Ground Rent.....		89,520 03	
Transfer Fees.....		3,640 00	
Provincial Assay Fees.....	744 75		1,335,320 78
Casual Fees	1,216 43		
Cullers' Fees	48 00		
Algonquin Provincial Park	3,912 49	2,009 18	
Quetico Provincial Park	180 98		
Forest Reserves.....	767 50		
		4,860 97	
REFUNDS.			
Fire Ranging		40,357 11	6,870 15
Wood Ranging		10,383 18	
Algonquin Park, Cleaning Right-of-Way.....		3,427 48	
Colonization Revenue		1,127 23	
Contingencies		122 85	
Emigration Work in Great Britain.....		56 15	
Mines and Mining		11 20	
Salaries and Expenses.....		2 00	
Surveys		3 00	
			55,491 00
			\$1,860,557 37

D. GEO. ROSS,
Accountant.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 5.

Statement of Receipts of the Department of Lands, Forests and Mines for the year ending October 31st, 1916, which are considered as Special Funds.

Service.	\$ c.	\$ c.
<i>Clergy Lands.</i>		
Principal.....	874 35	
Interest.....	817 97	1,692 32
<i>Common School Lands.</i>		
Principal.....	1,838 62	
Interest.....	1,921 86	3,760 48
<i>University Lands.</i>		
Principal.....	1,248 95	
Interest.....	269 56	1,518 51
		\$6,971 31

D. GEO. ROSS,
Accountant.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 6.

Statement of Disbursements of the Department of Lands, Forests and Mines for the year ending October 31st, 1916.

Service.	\$ c.	\$ c.	\$ c.
AGENTS' SALARIES AND DISBURSEMENTS.			
<i>Land, \$17,251.77.</i>			
Anderson, T. V.	500 00		
Disbursements	21 03		
		521 03	
Arthurs, E.		200 00	
Baker, R. H.		350 00	
Bolger, J. W.	700 00		
Disbursements	74 50		
		774 50	
Both, C.		200 00	
Brown, J. B.	1,000 00		
Disbursements	109 45		
		1,109 45	
Brown, J.	172 90		
Disbursements	3 78		
		176 68	
Burrows, W. A.	700 00		
Disbursements	101 80		
		801 80	
Byers, R. J.	257 59		
Disbursements	2 15		
		259 74	
Cameron, W.	500 00		
Disbursements	47 00		
		547 00	
Campbell, Miss I. M.	500 00		
Disbursements	13 00		
		513 00	
Dempsey, S. J.	600 00		
Disbursements	57 55		
		657 55	
Dodds, T.	300 00		
Disbursements	3 00		
		303 00	
Douglas, W. J.	500 00		
Disbursements	12 00		
		512 00	
Ellis, H. J.		500 00	
Flesher, H. H.		241 61	
Freeborn, Dr. J. S.	500 00		
Disbursements	7 90		
		507 90	
Gibson, J. E.	500 00		
Disbursements	70 00		
		570 00	
Ginn, F. E.	600 00		
Disbursements	518 20		
		1,118 20	
Hales, W.		250 00	
Hollands, C. J.		300 00	
		10,413 46	

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		10,413 46	
<i>AGENTS' SALARIES AND DISBURSEMENTS.—Continued.</i>			
<i>Land.—Concluded.</i>			
Jenkin, W.	500 00		
Disbursements	6 05	506 05	
Langlois, E.	312 30		
Disbursements	9 78	322 08	
Lemieux, J. A.		300 00	
McFayden, A.	500 00		
Disbursements	52 30	552 30	
MacLennan, J. K.		500 00	
Noble, E.	300 00		
Disbursements	7 20	307 20	
Parsons, W. J.	500 00		
Disbursements	21 00	521 00	
Phillion, J. A.	500 00		
Disbursements	19 68	519 68	
Prince, A.	500 00		
Disbursements	18 75	518 75	
Small, R.	500 00		
Disbursements	16 00	516 00	
Spry, W. L.	400 00		
Disbursements	488 75	888 75	
Watt, F.		300 00	
Whybourne, W. E.	250 00		
Disbursements	9 00	259 00	
Wilson, A. N.	175 00		
Disbursements	12 50	187 50	
Woollings, J.	600 00		
Disbursements	40 00	640 00	
<i>Homestead Inspectors, \$12,593.23.</i>			
Barr, J.	1,200 00		
Disbursements	691 10	1,891 10	
Bastien, J. A.	600 00		
Disbursements	288 17	888 17	
Burnes, C. W.	900 00		
Disbursements	209 95	1,109 95	
Cragg, W. V.	1,200 00		
Disbursements	226 96	1,426 96	
		22,567 95	

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		22,567 95	
<i>AGENTS' SALARIES AND DISBURSEMENTS.—Continued.</i>			
<i>Homestead Inspectors.—Concluded.</i>			
Dean, T.	600 00		
Disbursements	45 65		
		645 65	
Hughes, T.	800 00		
Disbursements	402 35		
		1,202 35	
Poole, E. G.		300 00	
Quenneville, I.	600 00		
Disbursements	342 20		
		942 20	
Smith, D.	1,000 00		
Disbursements	240 70		
		1,240 70	
Watson, T. P.	1,000 00		
Disbursements	422 15		
		1,422 15	
Wigle, R. G.	1,000 00		
Disbursements	524 00		
		1,524 00	
<i>Timber, \$29,402.13.</i>			
Bremner, G.	1,300 00		
Disbursements	439 45		
		1,739 45	
Christie, W. P.	1,600 00		
Disbursements	228 05		
		1,828 05	
Hawkins, S. J.	1,500 00		
Disbursements	363 99		
		1,863 99	
Henderson, C.	1,800 00		
Webster, W. A., Assistant	1,600 00		
Disbursements	346 00		
		3,746 00	
Johnson, S. M.	1,600 00		
Disbursements	142 47		
		1,742 47	
MacDonald, S. C.	1,600 00		
Disbursements	187 84		
		1,787 84	
Margach, W.	1,600 00		
Legris, J., Assistant	1,300 00		
Disbursements	1,134 27		
		4,034 27	
Maughan, J.	1,500 00		
Disbursements	388 75		
		1,888 75	
McDonald, H.	1,500 00		
Disbursements	438 31		
		1,938 31	
McDougall, J. T.	1,600 00		
Disbursements	710 54		
		2,310 54	
Oliver, J. A.	1,500 00		
Disbursements	1,030 92		
		2,530 92	
Stevenson, A.	1,500 00		
Disbursements	436 46		
		1,936 46	
		57,192 05	

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		57,392 05	
AGENTS' SALARIES AND DISBURSEMENTS.— <i>Concluded.</i>			
<i>Timber.—Concluded.</i>			
Watts, G.	1,500 00		
McDonald, A., Assistant	265 18		
Disbursements	289 90	2,055 08	
<i>Miscellaneous, \$1,373.08.</i>			
Bilton, G., Caretaker Islands in North and South Crosby		25 00	
Foster, F., Inspector of the Townships of Hanna and St. Johns		47 50	
Jamieson, W. H., Caretaker Islands in Dog and Laboria Lakes		50 00	
McArthur, T. A., Inspector of Agencies	600 00		
Disbursements	605 40	1,205 40	
Stewart, J. A., Disbursements <i>re</i> Inspection of the Township of St. Johns		45 18	60,620 21
OTTAWA AGENCY.			
Darby, E. J., Agent		1,500 00	
Larose, S. C., Clerk		1,000 00	
Rent	700 00		
Disbursements	83 70	783 70	
WOOD RANGING.			3,283 70
Acheson, Ira M.		70 00	
Allen, R. A.		815 00	
Allen, Geo.		75 00	
Ansley, W. E.		535 00	
Arnell, Wm.		1,135 00	
Bailey, S. J.		525 00	
Bailey, Alex.		180 00	
Barrett, Thos.		914 00	
Bedard, E.		306 00	
Berlinguette, J.		352 00	
Bliss, L. E.	655 00		
Disbursements	170 61	825 61	
Boyer, P.		248 50	
Bremner, G. A. Disbursements ..		16 75	
Bromley, T.		650 00	
Brooks, W. J.		635 00	
Buchan, S.		361 00	
Buisson, Wm.		650 00	
Cameron, John		460 00	
Cameron, John		204 00	
Canore, Joe		30 00	
Carnfel, T.		387 00	
Carter, Geo.		488 00	
Castonguay, A. C.		655 00	
Chenier, D. A.		1,380 00	
Clairmont, E.		576 00	
Clapson, H.		255 00	
Close, R. J.		175 75	
Cloud, Wm.		248 50	
Cole, R.		187 62	
Comer, B. F.		368 00	
<i>Carried forward</i>		13,708 73	63,903 91

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		13,708 73	63,903 91
<i>WOOD RANGING.—Continued.</i>			
Connelly, Dan		680 00	
Corrigan, R. T.		935 00	
Coyne, Phin		770 00	
Cross, R. J.		372 00	
Darling, J. M.		855 00	
Decarey, E.		15 00	
Deneen, M.		30 00	
Descoteaux, H.		9 00	
Didier, H.		910 00	
Dougherty, J. M.		512 00	
Doxsee, J. E.		1,010 00	
Dunn, J. F.		235 00	
Dunn, Wm.		285 00	
Durrell, Wm.		1,420 00	
Duval, C. A.	690 00		
Disbursements	5 50		
		695 50	
Dyson, I.		258 00	
Emlaw O.		595 00	
Fairbairn, N. H.		751 00	
Ferguson, A. E.		1,100 00	
Fisher, Geo.		440 00	
Fletcher, M.		494 00	
Fraser, D.		1,180 00	
Fraser, T.		24 00	
Fraser, Don.		93 00	
Fraser, W. A.		95 00	
Gamey, W. H.		445 00	
Ganton, D.		85 00	
Gilligan, E. J.		535 00	
Gordon, I. B.		372 00	
Gordon, Joseph		287 50	
Hagan, E. G.		760 00	
Haines, B.		294 00	
Hand, T.	348 00		
Disbursements	61 15		
		409 15	
Hart, I.		766 00	
Hartley, C.		1,230 00	
Hauralty, P.		291 00	
Hawkins, W.		92 00	
Hawkins, S. J. Disbursements..		39 90	
Henderson, A. E.		885 00	
Henderson, A. E.		875 00	
Henderson, Chas. Disbursements..		473 05	
Henderson, L.		553 00	
Henderson, L. E.		30 00	
Henderson, J.		365 75	
Hey, Ben.		324 00	
Hindson, C. E. Disbursements..		35 35	
Hoff, J. S. M.		56 00	
Hogarth, J.		670 00	
Hornick, Geo.		38 00	
Huckson, Alf.		48 75	
Hudson, R.		187 50	
Hurdman, W. H.		725 00	
Hutton, J.		1,140 00	
Jamieson, J.		180 00	
Jones, W.		328 00	
<i>Carried forward</i>		39,973 18	63,903 91

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		39,973 18	63,903 91
<i>WOOD RANGING.—Continued.</i>			
Kernahan, G. A.		444 00	
Lamon, Wm.		88 00	
Lapoint, James		63 00	
Laundry, H.		82 50	
Leblanc, E.		30 00	
Lee, J. B.		975 00	
Legris, J. Disbursements..		15 80	
Leishman, E.		490 00	
Lepage, L.		42 00	
LeRoy, Levi		558 50	
Long, H. E.	905 00		
Disbursements	9 05		
		914 05	
Lowè, W. C.		216 00	
Macdonell, R. D.		535 00	
MacGillivray, G.		349 00	
Manice, Wm.		1,270 00	
Margach, Wm. Disbursements..		1,353 68	
Margach, J. A.		510 00	
Marr, H. S.		24 00	
Marsh, Ed.		230 00	
Maughan, J. Disbursements..		101 19	
Menzies, A.	1,620 00		
Disbursements	402 75		
		2,022 75	
Mercier, Ed.		292 50	
Milway, J. H.		837 00	
Miniece, Wm.		70 00	
Molyneaux, G.		610 00	
Mongrain, Fred		17 50	
Mooney, L.	1,710 75		
Disbursements	597 25		
		2,308 00	
Moran, A.		1,700 00	
Morel, H.		448 00	
Murray, Wm.		1,669 00	
Murray, Earl		292 50	
Murray, James		448 50	
Murray, Thos.		172 50	
Murray, John		17 25	
McAulay, W. D.		780 00	
McCaw, J. G.		1,565 00	
McCaw, J. E.		935 00	
McCuaig, J. A.		391 00	
McCuaig, Roy		323 00	
McDonald, J. D.		1,700 00	
McDonald, H. Disbursements..		4 50	
McDougall, J. T. Disbursements..		33 70	
McFarlane, J. A.		292 50	
McFarlane, Alex.		437 00	
McGillivray, D. D.		360 00	
McGregor, Wm.		360 00	
McGuire, C.	420 00		
Disbursements	25 05		
		445 05	
McIvor, J. A.		1,132 00	
McKelvy, J.		18 00	
McKendry, W. B.		55 00	
McLaughlin, J.		332 50	
McLean, J.	1,615 00		
Disbursements	162 75		
		1,777 75	
<i>Carried forward</i>		70,112 40	63,903 91

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		70,112 40	63,903 91
WOOD RANGING.— <i>Concluded.</i>			
McLeod, Wm.		30 00	
McManemun, C.		442 75	
McNabb, A.		970 00	
McPherson, J. S.		1,435 00	
McRae, D. A.		588 00	
Nault, J.		184 00	
Nelson, P.		87 00	
Nevinson, W. H.		280 00	
Nicoll, Geo.		288 75	
Niblet, Jas.		100 00	
Oliver, J. A. Disbursements..		829 10	
Payment, Paul		372 00	
Pelton, F.		228 25	
Pigott, J.		870 00	
Quinn, A.		387 00	
Reid, J.		1,050 00	
Ricard, A.		186 00	
Ridley, R.		1,410 00	
Ritchie, J. F.		920 00	
Ross, S.		1,067 50	
Ryan, Jas.		376 00	
Sharpe, Jas.		930 00	
Shaw, A.		940 00	
Shaw, D.		296 00	
Simpson, Wm.		1,115 00	
Smith, J. D. C.		372 00	
Smith, Geo.		370 50	
Snyder, F.		294 00	
Spavin, John		250 00	
Spence, D.		1,565 00	
Spofford, Thos.		112 50	
Squires, John		14 25	
Stein, P.	1,232 31		
Disbursements	195 00		
		1,427 31	
Talouse, B.		270 00	
Thompson, W. B.		540 00	
Thorburn, D.		250 00	
Tichborne, A.		600 00	
Urquhart, A.		1,115 00	
Vanderburg, N.		64 00	
Vincent, H. T.		1,650 00	
Watts, Geo. Disbursements..		34 35	
Webster, W. A. Disbursements..		423 06	
Western, C.		700 00	
Whelan, P. J.		1,700 00	
Wilkins, G. N.		745 00	
Wilson, D.	1,188 25		
Disbursements	32 70		
		1,220 95	
Wilson, C.		6 00	
Windle, J.		189 00	
Wisseau, E.		190 00	
Wisseau, L.		150 00	
Wood, W. D.		735 00	
Wylie, B. M.		400 00	
Young, R. J.		695 00	
Young, J. J.		361 00	
Yuill, Thos.		340 00	
			102,293 67
<i>Carried forward</i>			166,197 58

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>			166,197 58
EXPLORATION AND ESTIMATION OF TIMBER BERTHS.			
Henderson, Chas. Disbursements		500 00	
Maughan, Jos. Disbursements		500 00	
Oliver, J. A. Disbursements		148 95	
			1,148 95
FIRE RANGING.			
Acheson, I. M.		327 50	
Adams, Alex.		380 00	
Adair, Robt.		372 50	
Allen, R. A.		920 00	
Allen, David		337 50	
Anderson, Ollie		372 50	
Armstrong, W. H.		365 00	
Armstrong, E. L.		357 50	
Arnold, D. O.		362 50	
Ashby, L. P.		372 50	
Bailey, H.		415 00	
Baird, C.		65 00	
Baker, J. A.		305 00	
Barrie, T.		340 00	
Bates, R.		376 75	
Beach, F. C.		352 50	
Beddome, W. E.		85 00	
Belcher, E. D.		375 00	
Bevan, S. W.		347 50	
Bilow, J. W.		372 50	
Blair, Geo.	840 00		
Disbursements	451 81		
		1,291 81	
Bliss, L. E. Disbursements		1,068 14	
Bookhout, H.		367 50	
Boivin, John		300 00	
Boucher, C.		377 50	
Bowers, G.		352 50	
Bowins, J.		330 00	
Bowland, J. J.	568 00		
Disbursements	94 45		
		662 45	
Bowles, John		302 50	
Bradley, E. M.		352 50	
Brant, Geo.		312 50	
Brewer, A.		372 50	
Brown, Aug.		327 50	
Brown, T. E.		375 00	
Brum, A. W.		840 00	
Bulmer, A.		350 00	
Bunting, H. T.		370 00	
Caldwell, C. N.		352 50	
Campbell, D.		402 50	
Campbell, T. J.		337 50	
Cambell, Wm.		347 50	
Campbell, R. A.		347 50	
Campbell, Alex.		310 00	
Canfield, H.		84 00	
Case, G. H.		315 00	
Case, Geo.		376 40	
Caslick, Wm.		345 00	
Canadian Express Company Express ..		18 63	
Chambers, T.		367 50	
Chaffey, Wm.		372 50	
Chausse, A.		265 00	
<i>Carried forward</i>		19,795 68	167,346 53

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		19,795 68	167,346 53
<i>FIRE RANGING.—Continued.</i>			
Chapman, Wm.		407 50	
Childs, Jas.		347 50	
Christie, W. P. Disbursements..		371 49	
Christie, Geo.		337 50	
Clark, H.		335 00	
Clary, J. H.		295 00	
Connell, Wm.		387 50	
Cole, W. M.		352 50	
Cook, F. H.		371 25	
Corman, H. E.		347 50	
Cottman, J. T.		352 50	
Cone, Phin	840 00		
Disbursements	226 01		
		1,066 01	
Crawford, John		372 50	
Craig, J.		320 00	
Crass, W. E.		135 00	
Crosbie, W. R.		335 00	
Culen, W. F.		377 50	
Davidson, Ira		342 50	
Dean, A.		352 50	
Dennie, F. J.		504 00	
Derouard, M.		200 00	
Didier, L. P.		840 00	
Donio, J.		365 00	
Douglas, J. R.		347 50	
Dowd, H. L.		360 00	
Doyle, James		382 50	
Durnin, C. S.		612 00	
Durocher, F.		160 00	
Dusang, A.		376 75	
Eilber, Geo.		377 50	
Elliott, W. J.		347 50	
Elliott, J.		347 50	
Elliott, C. H.		347 50	
Ellis, E. C.		377 50	
Ellsworth, C. B.		315 00	
Evans, A.		367 50	
Fairburn, N. H.		335 00	
Favereau, Geo.		380 00	
Ferguson, T.		392 50	
Ferguson, Angus		347 50	
Ferguson, Archie		347 50	
Ferguson, Geo.		380 00	
Fisher, Geo.		800 00	
Fletcher, N.		285 00	
Fraser, A. E.		340 00	
Fraser, Gordon		345 00	
Fraser, W. A.		342 50	
Fowlie, Wm.		365 00	
Fox, A.		352 50	
Gagne, F.	900 00		
Disbursements	232 00		
		1,132 00	
Gale, J. E.		315 00	
Gamble, Wm.		295 00	
Garrow, J.		322 50	
Garrow, James		367 50	
<i>Carried forward</i>		41,074 18	167,346 53

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		41,074 18	167,346 53
<i>FIRE RANGING.—Continued.</i>			
Gault, J.		342 50	
Gauthier, Theo.		380 00	
Gemmill, John	568 00		
Disbursements	196 70		
		764 70	
Gorman, D.		340 00	
Grant, B. A.		377 50	
Guthrie, Wm.		382 50	
Hamon, F.		377 50	
Hand, Thos.		568 00	
Harris, C.		354 75	
Haskins, W.		342 50	
Henderson, J.		262 50	
Henderson, C. Disbursements ..		84 00	
Hey, Ben		840 00	
Hill, E.		12 50	
Hindson, C. E. Disbursements ..		51 16	
Hopkins, R. D.		342 50	
House, O.		160 00	
Huckson, A. H.	1,600 00		
Disbursements	183 74		
		1,783 74	
Hume, O. B.		250 00	
Humphreys, E.		345 00	
Humphries, S.		315 00	
Hunter, H.		335 00	
Hyde, Jas.		382 50	
Ireland, H.		260 00	
Irish, Wm.		330 00	
Irwin, T.		342 50	
Isbister, J. A.		360 25	
Jamieson, K. W.		342 50	
Jenkins, S.	642 00		
Disbursements	828 82		
		1,470 82	
Jerrett, E. L.		377 50	
Johnson, F.		360 00	
Johnson, Wm.		387 50	
Johnson, Alex.		365 00	
Johnston, John		382 50	
Jolicoure, P.		117 50	
Keenahan, Matt.		382 50	
Kelly, Timothy		380 00	
Keely, C. A.		357 50	
Kerr, A.		342 50	
Kiely, M.		337 50	
Kinney, Wm.		396 00	
King's Printer		650 70	
Kitchen, James	Supplies ..	387 50	
Lalone, H.		330 00	
Langford, Thos.		382 50	
Lanktree, J.		375 00	
Lee, Jas. B.	815 00		
Disbursements	453 34		
		1,268 34	
Lee, E. J.		362 50	
Liddilcott, T.		347 50	
Lofquist, M.		372 50	
<i>Carried forward</i>		62,236 64	167,346 53

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		62,236 64	167,346 53
<i>FIRE RANGING.—Continued.</i>			
Long, H. E.	755 00		
Disbursements	325 88		
MacDonald, S. C. Disbursements ..		1,080 88	
MacDonald, M.		7 15	
MacDonell, L. P.		152 50	
Macdonell, R. D.		382 50	
MacGregor, W. H.		840 00	
Disbursements	855 00		
	938 93		
MacNeil, J. A.		1,793 93	
Maidens, W.		375 00	
Margach, Wm. Disbursements ..		347 50	
Margach, J. A.		870 39	
Martin, N.		476 00	
Martin, T.		342 50	
May, H.		305 00	
Disbursements	795 00		
	113 66		
Menard, H.		908 66	
Methodist Book and Publishing House. Supplies.		352 50	
Metzger, P.		25 15	
Milway, J. H.		135 00	
Moir, A.		840 00	
Molyneaux, Geo.		320 00	
Moore, Chas.		572 00	
Moore, J. V.		357 50	
Morton, Wm.		342 50	
McAulay, W. D.		365 00	
McColl, John		568 00	
McColl, Wm.		352 50	
McCoy, L.		352 50	
McCullough, D. J.		115 00	
McDonald, A.		382 50	
McDonald, J.		352 50	
McDonald, C.		317 50	
McGregor, J. A.		295 00	
McIntosh, Jas.		372 50	
McKendry, W. B.		370 00	
McKinnon, H.		390 00	
McKinnon, E.		340 00	
McLeod, J. A.		377 50	
McLure, D.		330 00	
McMahon, C. E.		352 50	
McMaster, W.		362 50	
McMaster, J.		42 50	
McNiece, J. W.		65 00	
Disbursements	375 00		
	5 00		
McPhail, H.		380 00	
McRae, D. A.		347 50	
Neil, R. L.		426 00	
Neil, Wm.		367 50	
Neill, Joseph		165 00	
Nelson, N.		372 50	
Niddery, R. J.		167 50	
O'Connell, J.		215 00	
Oliver, J. A. Disbursements ..		380 00	
		266 42	
<i>Carried forward</i>		82,253 72	167,346 53

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.	\$	c.
<i>Brought forward</i>			82,253	72	167,346	53
<i>FIRE RANGING.—Continued.</i>						
Olton, Wm. P.			357	50		
Packnool, C. E.			347	50		
Parkhouse, H.			355	00		
Peacock, Wm.			347	50		
Pigott, H.			347	50		
Pigott, J. A.			347	50		
Pingle, A.			352	50		
Piper, C.			340	00		
Platt, S. P.			200	00		
Pollock, R.			347	50		
Porter, C. T.			100	00		
Porteous, Wm.			377	50		
Potter, L. I.			347	50		
Pritchard, F.			514	50		
Prophet, E. A.			357	50		
Rabbitts, Max	775	00				
Disbursements	333	27				
			1,108	27		
Ragen, J.			305	00		
Ralston, D.			347	50		
Read, C.			290	00		
Regan, J.			327	50		
Revells, L. O.			784	00		
Reynolds, A.			307	50		
Rhodes, F. M.			142	50		
Robinson, J. B.			305	00		
Rochfort, A.			380	00		
Rowe, James			390	00		
Rusk, O. W.			1	94		
Savard, A.			347	50		
Scott, W.	422	50				
Disbursements	173	75				
			596	25		
Scott, T. E.			352	50		
Scott, R.			568	00		
Seymour, R. V.			202	50		
Shoeberg, Alf.			75	00		
Sinclair, D.			367	50		
Sing, W. H.			138	00		
Skidmore, G. H.			347	50		
Small, M. A.			372	50		
Smith, V.			514	50		
Smith, E. J.			307	50		
Smith, L.			330	00		
Spillett, John			202	50		
Spofford, T.			356	50		
Staniforth, A.			365	00		
State, Sam			347	50		
Stewart, J. A.	765	00				
Disbursements	653	75				
			1,418	75		
Sudds, D.			374	00		
Superior Construction Co.			982	93		
Swanson, G.			376	75		
Sweeney, L.			125	00		
Tang, John			382	50		
Thomson, W. B.			195	00		
<i>Carried forward</i>			101,628	11	167,346	53

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$1 c.
<i>Brought forward</i>		101,628 11	167,346 53
FIRE RANGING.—Concluded.			
Toomer, S.		347 50	
Tough, J. P.		372 50	
Tripp, E. C.		370 00	
Urlin, W. R.		232 50	
Urquhart, A.		536 00	
Walker, Geo.		375 00	
Watson, V. C.		352 50	
Watts, Geo. Disbursements..		142 09	
Warren, A. H.		352 50	
Weir, G. A.		347 50	
Welch, James		377 50	
West, W. H.		302 50	
Western, C.		432 00	
Whitley, P. L.		225 00	
White, J. H.		990 00	
Wickens, H.		376 75	
Wilkins, G. N.		568 00	
Wilson, J. G.		345 00	
Williams, R. A.		25 00	
Windle, James		920 00	
Wood, Seth		382 50	
Woodcock, Geo.		327 50	
Wright, H. H.		352 50	
Youmans, A.		360 25	
Young, S.		77 50	
			111,118 20
FOREST RESERVES.			
<i>Temagami Reserve, \$37,789.21.</i>			
Allen, Geo.		322 50	
Armstrong, G. N.		292 50	
Aubee, T.		345 00	
Avern, F. B.		352 50	
Barrett, T.		666 00	
Black, G.		345 00	
Blanchette, H.		355 00	
Bond, A. E.		150 00	
Brown, C. C.		335 00	
Brown, J. R.		362 50	
Buisson, Wm.		362 50	
Burns, J. L.		345 00	
Burns, M. P.		305 00	
Carleton, Geo.		347 50	
Cavanagh, S.		347 50	
Champagne, I.		355 00	
Cooper, A. W.		347 50	
Crawford, J.		282 50	
D'Embremont, F.		255 00	
Desrosiers, J.		355 00	
Desrosiers, E.		300 00	
Didier, H.	765 00		
Disbursements	222 53		
		987 53	
Doyle, T. J.		230 00	
Edgar, J.		300 00	
Emond, A.		332 50	
Faeris, R.		1,059 00	
Flanagan, J.		325 00	
<i>Carried forward</i>		10,362 53	278,464 73

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		10,362 53	278,464 73
<i>FOREST RESERVES.—Continued.</i>			
<i>Temagami Reserve.—Continued.</i>			
Flannigan, Wm.		300 00	
Friday, J.		50 00	
Gale, W. J.		355 00	
Galt, James		312 50	
Green, V. C.		320 00	
Grenier, J.		317 50	
Grindrod, S.		352 50	
Hamilton, J. E.		332 50	
Harrison, J. W.		915 00	
Hartley, M.		312 50	
Hartt, J. C.		175 00	
Hartt, I. B.		357 50	
Hawley, D. J.		347 50	
Henderson, C.	Disbursements	8 40	
Hindson, C. E.	1,300 00		
Disbursements	718 08		
		2,018 08	
Hunt, T.		300 00	
Hunter, B. J.		315 09	
Jacob, S. B.		37 50	
Jennings, J. E.		350 00	
Johnston, W.		357 50	
Kennedy, Wm.		387 50	
Lamarche, A.		915 00	
Lewis, S. T.		255 00	
Little, R. R.		337 50	
Mathers, F. W.		320 00	
Miller, J. R.		347 50	
Minor, E.		345 00	
Moffatt, A.		157 50	
Moore, C. A.		352 50	
Morrison, D. R.		355 00	
Morin, J.		332 50	
Morphy, C.		347 50	
McCosh, J. T.		335 00	
McGarvey, P.		325 00	
McLeish, W. J.		345 00	
McLean, R. S.		200 00	
McKechnie, A.		347 50	
McMullin, Wm.		357 50	
McNeil, E. R.		330 00	
McNiven, A.		310 00	
McNulty, T.		167 50	
Nadon, P.		355 09	
Neil, H. J.		342 50	
Nelson, P.		145 00	
Pacquette, A.		355 00	
Parent, J.		355 00	
Parker, J. J.		230 00	
Patterson, B.		357 50	
Petrant, Wm.		360 00	
Pirie, J. B.		322 50	
Powell, J.		357 50	
Poulin, Wm.		362 50	
Prendergast, R. H.		362 50	
Reesor, G. O.		347 50	
<i>Carried forward</i>		29,619 01	278,464 73

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		29,619 01	278,464 73
<i>FOREST RESERVES.—Continued.</i>			
<i>Temagami Reserve.—Concluded.</i>			
Sage, P.		345 00	
Sauve, J.		317 50	
Scully, James		322 50	
Simpson, T.		347 50	
Smith, E. J.		345 00	
Stewart, E. B.		182 50	
Street, H. W.		307 50	
Thorpe, Thos.		365 00	
Throthier, J.		347 50	
Tremblay, J.		355 00	
Vivaris, D.		915 00	
Wallace, A.		347 50	
White, J.		267 50	
White, W. J.		335 00	
White, Jos. W.		357 50	
Whitmore, Rouse		237 50	
Wilson, B.		360 00	
Wilson, A.		345 00	
Wilding, C. H.		115 00	
Winder, A.		347 50	
Young, R. J.	850 00		
Disbursements	457 70		
		1,307 70	
<i>Metagami Reserve.—\$7,936.76.</i>			
Allan, Geo.		390 00	
Baker, Wm.		390 00	
Benn, H. F.		320 00	
Bingham, A. P.		277 50	
Blackwell, J. J.		352 50	
Burden, J.	915 00		
Disbursements	419 26		
		1,334 26	
Butler, W. J.		330 00	
Cameron, W. J.		347 50	
Cayen, J. B.		355 00	
Chubb, G. W.		350 00	
Dougherty, A. E.		355 00	
Freele, L. W. M.		352 50	
Harvey, C. B. S.		347 50	
Hendy, F.		327 50	
Hunter, H. J.		347 50	
Lawrence, C. F.		172 50	
McFayden, Jas.		425 00	
Papineau, Joe.		17 50	
Poulin, D.		352 50	
Schrubsole, E. W.		237 50	
Vine, Robt.		237 50	
Williams, S.		317 50	
<i>Mississaga Reserve.—\$18,722.89.</i>			
Acheson, D.		576 00	
Bebee, M. C. G.		325 00	
Bellanger, T.		337 50	
Best, H.		335 00	
Bishop, Frank		170 00	
Burch, Wm.		357 50	
<i>Carried forward</i>		47,826 97	278,464 73

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		47,826 97	278,464 73
<i>FOREST RESERVES.—Continued.</i>			
<i>Mississauga Reserve.—Concluded.</i>			
Cade, Geo.		385 00	
Carpenter, R. J.		385 00	
Charlebois, P.		280 00	
Cornett, W. G.		327 50	
Dougherty, A. E.		624 00	
Draper, Wm.		355 00	
Duck, W. S.		390 00	
Duval, C. A.	920 00		
Disbursements	914 89		
		1,834 89	
Dyson, I.		182 50	
Ecker, C. M.		385 00	
Eveline, S.		335 00	
Forman, H. R.		262 50	
Franklin, L.		387 50	
Galt, James		207 50	
Gidley, H. C.		165 00	
Godson, H.		380 00	
Gray, John		125 00	
Greenaway, A. M.		215 00	
Heenan, P.		335 00	
Hillman, John		375 00	
Hoban, James		307 50	
Hussy, Leo.		212 50	
Jean, A.		367 50	
Lacourse, H.		235 00	
Mann, D.		207 50	
Martin, Ed.		260 00	
Martin, H.		192 50	
Mathews, E. H.		340 00	
Mills, W. E.		335 00	
Miller, W. J.		451 00	
Morrison, A.		312 50	
McKay, A.		327 50	
McLaughlin, J.		340 00	
McLeod, W.		260 00	
McLeod, D. J.		22 50	
Nicholas, H.		532 00	
Orange, Wm.		265 00	
Penno, M. H.		170 00	
Phelan, R.		330 00	
Poulin, Nap.		382 50	
Sawyer, E. C.		335 00	
Seeley, L. F.		312 50	
Soucie, P.		377 50	
Spaniel, J.		257 50	
Spaniel, Alex.		277 50	
Stubbs, W. J.		335 00	
Turpin, R.		25 00	
Wells, Geo.		340 00	
Wright, T.		382 50	
Young, Walter		192 50	
<i>Nepigon Reserve.—\$18,881.24.</i>			
Allen, Wm.		397 50	
Barker, Alice	Telephone operator.	258 04	
Barton, J.		402 50	
<i>Carried forward</i>		65,506 90	278,464 73

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		65,506 90	278,464 73
<i>FOREST RESERVES.—Continued.</i>			
<i>Nepigon Reserve.—Concluded.</i>			
Blair, Thos.		36 00	
Blakely, E.		397 50	
Bliss, L. E.	1,030 00		
Disbursements	3,863 09		
		4,893 09	
Bouchard, J.		455 00	
Bouchard, M.		377 50	
Cooper, J.		142 50	
Desando, M.		397 50	
Deschamp, D.		415 00	
Dumont, O.		397 50	
Eachem, H.		240 00	
Findlayson, E.		417 50	
Fitzback, J.		377 50	
Fitzpatrick, P.		417 50	
Florence, E.		360 00	
Hardy, Frank		397 50	
Harris, D.		140 00	
Herbert, J.		397 50	
Kirkpatrick, E.		377 50	
Lafontaine, P.		105 00	
Lash, A.		397 50	
Leroy, L.		337 50	
Levesque, J.		417 50	
McDougall, N.		372 50	
McGuire, P.		377 50	
McKechnie, John		626 50	
McLellan, J.		112 50	
Micholson, J.		395 00	
Morrow, S.		397 50	
Netemegesic, E.		325 00	
Netemegesic, M.		97 50	
Rae, A.		437 50	
Rudolph, L.		397 50	
Smith, H.		422 61	
Stewart, J.		100 00	
Thompson, Jas.		422 50	
Vincent, Joe		397 50	
Visneau, P.		397 50	
Ward, J.		272 50	
Willan, Wm.		377 50	
<i>Eastern Reserve, \$2,804.68.</i>			
Bishop, J.		362 50	
Brown, H.		365 00	
Bushell, D.		365 00	
Gilmour, E.		365 00	
Head, Geo.		362 50	
Holmes, W.		365 00	
Tapping, T.	600 00		
Disbursements	19 68		
		619 68	
<i>Carried forward</i>		86,134 78	278,464 73

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.	\$	c.
<i>Brought forward</i>			86,134	78	278,464	73
FOREST RESERVES.— <i>Concluded.</i>						
<i>Sibley Reserve, \$832.50.</i>						
Hornick, Geo.			355	00		
Oliver, J. A.			100	00		
Quinn, J. J.			377	50	86,967	28
FORESTRY.						
Bell Telephone Company	43	60				
Express and Cartage	180	15				
			223	75		
Supplies			2,649	65		
Labor			5,881	49		
Sundries			209	30	8,964	19
MINES AND MINING.						
Miller, W. G., Provincial Geologist, services.....			4,550	00		
Knight, C. W., 1st Assistant Geologist, services.	2,250	00				
Disbursements	759	52				
			3,009	52		
Burrows, A. G., 2nd Assistant Geologist, services..	2,150	00				
Disbursements	595	90				
			2,745	90		
Hopkins, P. E., 3rd Assistant Geologist, services..	1,500	00				
Disbursements	913	24				
			2,413	24		
Rogers, W. R., Topographer, services.....	1,850	00				
Disbursements	38	97				
			1,888	97		
Bell, W. J., Cartographer, services			1,466	54		
Mickle, G. R., Mine Assessor, services	4,000	00				
Disbursements	484	85				
			4,484	85		
Godson, T. E., Mining Commissioner, services....	4,300	00				
Morris, W. H., Mining Commissioner's Clerk,	1,500	00				
services	1,087	28				
Disbursements			6,887	28		
Sutherland, T. F., Chief Inspector of Mines,						
services	2,500	00				
Disbursements	492	20				
			2,992	20		
Collins, E. A., 1st Assistant Inspector of Mines,						
services	2,300	00				
Disbursements	1,502	26				
			3,802	26		
McMillan, J. G., 2nd Assistant Inspector of Mines,						
services			2,281	72		
Bartlett, J., 3rd Assistant Inspector of Mines,	2,300	00				
services	1,275	58				
Disbursements			3,575	58		
Stovel, J. H., 4th Assistant Inspector of Mines,						
services	1,341	67				
Disbursements	605	64				
			1,947	31		
<i>Carried forward</i>			42,045	37	374,396	20

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		42,045 37	374,396 20
<i>MINES AND MINING.—Concluded.</i>			
McArthur, T. A., Inspector of Recorders' Offices, services	700 00		
Disbursements	414 90	1,114 90	
Baker, Prof. M. B., services	1,113 46		
Disbursements	425 94	1,539 40	
Beno, J. W., services	301 90		
Disbursements	220 62	522 52	
Dyer, W. S., services		242 31	
Ellsworth, Dr. H. V., services	288 46		
Disbursements	38 00	326 46	
Hutchinson, R. H., services	242 31		
Disbursements	16 10	258 41	
Jackson, P. A., services	346 50		
Disbursements	17 70	364 20	
Ledoux, Prof. A., services	450 00		
Disbursements	225 53	675 53	
Near, A. E., services	600 00		
Disbursements	175 45	775 45	
Parsons, A. L., services	274 04		
Disbursements	368 10	642 14	
Rothwell, T. E. Disbursements		23 35	
Scott, John, services	700 00		
Disbursements	246 73	946 73	
Thompson, Ellis, services	360 58		
Disbursements	464 76	825 34	
Todd, E. W., services		439 61	
Wheatley, A. C., services		230 76	
King's Printer		336 97	
Express		4 95	
Telegraphing		94 48	
Sundries		115 13	
<i>MINING RECORDERS.</i>			51,524 01
Campbell, C. A., Recorder	900 00		
Glazier, M. B., Clerk	31 15		
Loudon, W. E., Clerk	100 38		
Shanahan, Miss M., Stenographer	483 08		
Disbursements	445 50	1,960 11	
Gauthier, G. H., Recorder	1,500 00		
O'Brien, J. D., Clerk	1,026 56		
Loudon, W. E., Clerk	38 07		
Disbursements	836 31	3,400 94	
<i>Carried forward</i>		5,361 05	425,920 21

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		5,361 05	425,920 21
<i>MINING RECORDERS.—Concluded.</i>			
Hough, J. A., Recorder	1,200 00		
Browning, A. J., Clerk	333 00		
Ginn, H. G., Clerk	905 73		
Loudon, W. E., Clerk	273 45		
Powers, Miss E. M., Stenographer	95 00		
Disbursements	1,153 85	3,961 03	
Miller, N., Recorder	1,000 00		
Disbursements	220 25	1,220 25	
Morgan, J. W., Recorder	1,000 00		
Glazier, M. B., Clerk	273 46		
Morgan, M. R., Clerk	258 46		
Disbursements	412 57	1,944 49	
Morgan, M. R., Recorder	381 73		
Disbursements	191 65	573 38	
McAulay, N. J., Recorder	1,800 00		
Sarsfield, J. M., Clerk	1,200 00		
Louden, W. E., Clerk	152 32		
Munro, Miss E., Stenographer	785 00		
Disbursements	786 80	4,724 12	
McQuire, H. F., Recorder	500 00		
Disbursements	150 00	650 00	
Sheppard, H. E., Recorder	1,000 00		
Disbursements	184 45	1,184 45	
Skiff, A., Recorder	1,200 00		
Browning, A. J., Recorder	733 33		
Disbursements	590 11	2,523 44	
Spry, W. L., Recorder	750 00		
Disbursements	128 25	878 25	
Express	131 05		
King's Printer	808 16		
Methodist Book and Publishing House	21 31		
Telegraphing	19 45	979 97	
			24,000 43
<i>PROVINCIAL ASSAY OFFICE.</i>			
Kleiman, Samuel		16 00	
Leat, Arthur		104 00	
McNeill, W. K.		1,800 00	
O'Neill, Mark		182 00	
O'Neill, James		96 00	
Rothwell, T. E.	1,200 00		
Disbursements	120 05	1,320 05	
Todd, E. W.		540 00	
Supplies	499 05		
Disbursements	99 48	598 53	
			4,656 58
<i>Carried forward</i>			454,577 22

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>			454,577 22
CULLERS' ACT.			
Duff, A. S. ....Services..	12 00		
Disbursements	4 00		
		16 00	
McDougall, J. T. ....Disbursements..		13 30	
Oliver, J. A. ....Disbursements..		7 75	
Watts, Geo. ....Disbursements..		7 90	
			44 95
EXPENSES NOT OTHERWISE PROVIDED FOR.			
Gamble, W. P., Services <i>re</i> : Investigation of effect of Sulphur fumes	60 00		
Howitt, J. E., Disbursements <i>re</i> : Investigation of effect of Sulphur fumes	31 45		
Martin, N. R., Services	471 15		
Disbursements	331 90		
<i>re</i> : Investigation of effect of Sulphur fumes		894 50	
Kirkpatrick, J., Services <i>re</i> : Toronto Exhibition..	22 00		
McNeill, W. K., Services <i>re</i> : Toronto Exhibition..	75 00		
Searls, J. Y., Services <i>re</i> : Toronto Exhibition...	46 00		
Shaw, David, Services <i>re</i> : Toronto Exhibition...	20 00		
West, W. J., Services <i>re</i> : Toronto Exhibition...	42 50		
General Disbursements <i>re</i> : Toronto Exhibition...	1,106 75		
		1,312 25	
			2,206 75
SURVEYS			63,884 33
BOARD OF SURVEYORS			200 00
EXPERIMENTAL TREATMENT OF ORE			638 25
INVESTIGATION OF TREE DISEASES			5,211 17
INSURANCE			331 06
ALLOWANCE TO SCHOOL SECTIONS IN TOWNSHIP OF SOUTH WALSINGHAM			150 00
CANADIAN FORESTRY ASSOCIATION, grant			300 00
REFUNDS—Miscellaneous			14,315 32
COLONIZATION AND IMMIGRATION.			
PRINTING, ADVERTISING, ETC.		14,478 89	
BONUSES AND ADVANCES TO AGENTS		40 00	
TRANSPORTATION EXPENSES DISTRIBUTING SETTLERS.		99 00	
LAND GUIDES		619 00	
EMIGRATION WORK IN GREAT BRITAIN		22,112 11	
ALLOWANCE TO RICHARD REID		1,650 15	
RENTAL IMMIGRATION OFFICE		1,582 59	
ADVANCE COST OF FARM LABOURERS' TRANSPORTATION		766 67	
MAINTAINING HOMES		500 00	
WOMEN'S WELCOME HOSTEL		1,400 00	
IMPERIAL TAX		769 66	
			44,018 07
<i>Carried forward</i>			585,877 12

Appendix No. 6.—Concluded.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>			585,877 12
CONTINGENCIES.			
<i>Departmental.</i>			
Printing and Binding	3,602 54		
Stationery	4,674 44	8,276 98	
Postage	2,246 34		
Express	194 63	2,440 97	
Telegraphing	511 83		
Car Fare	60 00	571 83	
Subscriptions	269 68		
Advertising	3,477 35	3,747 03	
Typewriters and repairs		1,054 90	
Cain, W. C., travelling expenses	25 80		
Ferguson, Hon. G. H., travelling expenses	500 00		
Grigg, A., travelling expenses	20 70		
Hele, C. C., travelling expenses	132 84		
Houser, J., travelling expenses	35 50		
Hutcheon, J., disbursements	768 25		
Keefer, F. H., legal services	20 00		
Niven, F. J., travelling expenses	35 60		
Rorke, L. V., travelling expenses	285 65		
Steel Equipment Company of Canada, Installing Filing System	5,424 03	7,248 37	
Extra Clerks	5,146 92		
Sundries	192 47	5,339 39	
BUREAU OF MINES.			28,679 47
Printing and Binding	1,902 82		
Stationery	1,222 20	3,125 02	
Postage	650 98		
Telegraphing	60 07		
Express and Cartage	82 31		
Advertising	991 05		
Subscriptions	250 26		
Maps	3,569 70	5,604 37	
Typewriters, repairs, etc.	342 15		
Fisher, R. D., travelling expenses	4 85		
Nichols, F. J., Preparing Index	900 00		
Rogers, W. R., travelling expenses	47 52		
Ugnow, W. L., Preparing Report on Zinc De- posits in Eastern Canada	250 00	1,544 52	
Extra Clerks	1,657 34		
Sundries	153 81	1,811 15	
FORESTRY.			12,085 06
Zavitz, E. J., travelling expenses	312 29		
Newman, F. S., travelling expenses	118 00		
White, J. H., travelling expenses	14 15	444 44	
Postage	138 50		
Supplies	244 18		
Sundries	179 18	561 86	
COLONIZATION.			1,006 30
			1,848 20
			629,496 15

Appendix No. 7.

Statement of Expenses on account of various Services under the direction of the Department of Lands, Forests and Mines for the year ending October 31st, 1916.

Service.	\$ c.	\$ c.
ALGONQUIN PARK	30,010 30	
ALGONQUIN PARK, EXTINGUISHING SQUATTERS' CLAIMS	10 00	
ALGONQUIN PARK, CLEANING RIGHT-OF-WAY	5,452 83	35,473 13
QUETICO PROVINCIAL PARK		11,268 87
VETERANS' COMMUTATION		600 00
ROYAL NICKEL COMMISSION		37,578 14
LEGAL INVESTIGATIONS		700 00
DOMINION REDUCTION CO., Gold Quartz		9,955 76
BOUNTY ACT, EDWARD VII., CAP. 14.		
Deloro Mining and Reduction Co.	11,650 02	
Coniagas Reduction Co., Ltd.	11,555 67	
Metals Chemical Co., Ltd.	2,345 22	25,550 91
		121,126 71

D. GEO. ROSS,
Accountant.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 8.

PATENTS OFFICE (LANDS BRANCH).

Statement of Patents, etc., issued from 1st November, 1915, to 31st October, 1916.

Public Lands (late Crown).....	505
“ “ (late School).....	16
“ “ (late Clergy Reserves).....	7
“ “ (University)	19
Free Grant Lands (Act of 1913)	395
“ “ (Act of 1901) (Veterans)	92
Mining Lands (Patents).....	402
Mining “ (Leases).....	163
Crown Leases.....	18
Licenses of Occupation.....	43
Temagami Leases.....	4
Sand and Gravel Leases	5
Total.....	1,669

CHARLES S. JONES,
Clerk in Charge.

ALBERT GRIGG,
Deputy Minister.

Appendix

WOODS AND

Statement of Timber and Amounts accrued from Timber Dues, Ground

QUANTITY AND

Agencies.	Area covered by timber license.	Saw logs.				Boom and	
		Pine.		Other.		Pine.	
	Square miles.	Pieces.	Feet B.M.	Pieces.	Feet B.M.	Pieces.	Feet B.M.
Western Timber District	11,377	6,698,293	260,853,223	801,573	27,683,608	92,863	9,486,659
Belleville Timber District	507	144,087	2,556,900	117,067	3,678,027	1,082	133,450
Ottawa Timber District	3,828½	635,325	32,934,817	249,456	5,329,052	6,051	699,104
	15,712½	7,477,705	296,344,940	1,168,096	36,690,687	99,996	10,319,213

General Statement

Agencies.	Cordwood.		Tan Bark.	Railway Ties.	Posts.	Poles.	Stave Bolts.	Pulpwood,
	Hard.	Soft.						
	Cords.	Cords.	Cords.	Pieces.	Cords.	Pieces.	Cords.	Cords.
Western Timber District	6,721	30,623½	4,594	734,798	3,465	1,608	835	146,895
Belleville Timber District	2,465	.....	526½	506	3	.....	45	2,293
Ottawa Timber District	20	764	1,576	3,293	75	753	.....	20,325
	9,206	31,387½	6,696½	738,597	3,543	2,361	880	169,513

JOHN HOUSER,
Chief Clerk in Charge.

No. 9.

FORESTS.

Rent and Bonus during the year ending 31st October, 1916.

DESCRIPTION OF TIMBER.

Dimension.		Square Timber.		Pine.	Square Timber.		Cedar.	Piling.	Piling.	
Other.		Pine.			Birch.					
Pieces.	Feet B.M.	Pieces	Cubic feet.	Lineal feet.	Pieces	Cubic feet.	Lineal feet.	Lineal feet.	Pieces	Feet B.M.
9,367	1,303,597	1,816	96,851	298,611	142	4,271	1,250	72,282	1,500	135,864
1,473	221,296	.....	.....	.....	.....	.....	.....	11,860	.....	.....
3,601	472,386	.....	.....	.....	.....	.....	.....	.....	302	31,118
14,441	1,997,279	1,816	96,851	298,611	142	4,271	1,250	84,142	1,802	166,982

of Timber.—Concluded.

Amounts accrued.

Trans-fer bonus.	Interest.	Trespass.	Timber dues.	Bonus.	Deposits timber sales	Ground rent.	Total.
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
3,585 00	11,099 13	15,919 65	678,119 44	448,759 78	81,855 00	63,880 00	1,303,218 00
.....	446 69	2,697 61	8,263 39	749 92	.....	3,500 00	15,657 61
55 00	2,924 04	953 64	60,779 28	.....	.....	21,837 49	86,549 45
3,640 00	14,469 86	19,570 90	747,162 11	449,509 70	81,855 00	89,217 49	1,405,425 06

ALBERT GRIGG,
Deputy Minister.

Appendix No. 10.

WOODS AND FORESTS BRANCH.

Statement of revenue collected during the year ending October 31st, 1916.

	\$	c.
Amount of Western collections at Department.....	1,232,405	95
do Belleville collections “	21,844	72
do Ottawa collections “	81,070	11
	<u>\$1,335,320</u>	<u>78</u>

WOODS AND FORESTS BRANCH REVENUE.

October 31st, 1916.

WESTERN DISTRICT—

Timber dues	\$734,436	73
Bonus	337,550	09
Ground Rent.....	63,880	00
Interest on dues	10,955	94
Interest on Ground Rent	143	19
Transfer fees	3,585	00
Timber Sale Deposits.....	81,855	00
	<u>\$1,232,405</u>	<u>95</u>

OTTAWA DISTRICT—

Timber dues.....	56,253	58
Ground Rent.....	21,837	49
Interest on dues	2,785	21
Interest on Ground Rent	138	83
Transfer fees	55	00
	<u>81,070</u>	<u>11</u>

BELLEVILLE DISTRICT—

Timber dues.....	17,475	18
Bonus	422	85
Ground Rent.....	3,500	00
Interest on dues.....	426	17
Interest on Ground Rent	20	52
	<u>21,844</u>	<u>72</u>
	<u>\$1,335,320</u>	<u>78</u>

WOODS AND FORESTS.

Bonus	\$419,827	94
Timber dues.....	822,332	81
Ground Rent.....	89,520	03
Transfer fees	3,640	00
	<u>\$1,335,320</u>	<u>78</u>

JOHN HOUSER,
Chief Clerk in Charge.ALBERT GRIGG
Deputy Minister.

Appendix No. 11.

Statement of work done in the Military office, Lands branch of the Department of Lands, Forests and Mines, during the year ending October 31st, 1916.

References for Veteran Patents issued.....	132
Locations under military certificates.....	76
Certificates applied in payment of lands	18
Certificates surrendered for commutation money	12
Letters received	3,550
Letters written.....	3,200
Special letters to agents	740
Special letters to mining recorders.....	190
Maps and reports supplied to veterans	1,050
Printed forms sent out	300
Copies of Veteran Act supplied	60

H. E. JOHNSTON,
Clerk in Charge.

ALBERT GRIGG,
Deputy Minister.

Appendix No. 12.

LIST OF CULLERS.

Anderson, M. M.....	Almonte.	Brown, Silas.....	Klock's Mills.
Allan, James D.....	Bracebridge.	Boland, W. G.....	Eganville.
Appleton, Erwin B.....	Bracebridge.	Baulke, George R.....	Aylmer, Que.
Albert, Andrew.....	Ottawa.	Bouchey, Arthur.....	Massey.
Adams, J. Q.....	Longford Mills.	Buchanan, Mark.....	Trout Mills.
Anderson, Patrick J.....	Campbellford.	Barrett, W. J.....	Thessalon.
Anderson, J. C.....	Gravenhurst.	Bromley, Thomas.....	Pembroke.
Allan, Alfred.....	Ottawa.	Bremner, John L.....	Adamston.
Allen, R. A.....	Bannockburn.	Breen, Bernard.....	Garden River.
Aikens, Geo. M.....	French River.	Buie, Dougal.....	Providence Bay.
Appleby, Ridley.....	Katrine.	Baker, Thomas.....	Blind River.
Adams, James M.....	Sault Ste. Marie.	Blais, Felix.....	Hull, Que.
Aylward, James.....	Peterborough.	Balsdon, George.....	Keewatin.
Archibald, John L.....	Keewatin.	Bromley, W. H.....	Pembroke.
Austin, Wm. G.....	Renfrew.	Bowers, Isaac.....	Little Current.
Anderson, Charles.....	Little Current.	Brown, Thomas.....	Barrie.
Anderson, John.....	Cartier.	Bass, Walter R.....	W. Huntingdon.
Adair, Thomas Albert.....	Gananoque.	Bates, Robert.....	Kenora.
Anderson, J. G.....	Alpena, Mich.	Binnie, Thomas.....	Port Arthur.
Alexander, Samuel.....	Arden.	Blair, William.....	Keewatin.
Adams, Wm.....	Westmeath.	Bick, Thomas.....	Bobcaygeon.
Arkle, George.....	Kenora.	Burke, John Thomas.....	Midland.
Armstrong, Jas. Theodore.....	McKellar.	Buchan, Sterling.....	L'Orignal.
Armstrong, Thomas J.....	Arnprior.	Brown, Joseph A.....	Spanish.
Acheson, Ira M.....	Westmeath.	Baird, P. C.....	Rainy River.
Albert, Alfred E.....	Ottawa.	Brill, J. W.....	Mine Centre.
Alma, John E.....	Hawkesbury.	Beattie, Arthur W.....	Arnprior.
Adams, George A.....	Longford.	Brook, H. S.....	Ottawa.
Ansley, John Albert.....	Thessalon.	Benson, John Bird.....	Midland.
Ansley, John Jenkins.....	Thessalon.	Brennan, Rich'd Lawrence.....	Peterborough.
Ainslie, Alexander.....	Spanish.	Brown, Hugh Riside.....	Huntsville.
Apleton, E. A.....	Kenora.	Bryan, Frank.....	Keewatin.
Arnill, William.....	Iron Bridge.	Bennett, Edward Clinton.....	Ahmie Harbour.
Adams, Fred.....	L'Orignal.	Blaine, Harvie Thomas.....	Orillia.
Alexander, R. Harvey.....	Spragge.	Barrett, Thomas.....	Barrie.
Alexander, J. Albert.....	Spragge.	Bickell, James Manuel.....	Sault Ste. Marie.
Ainslie, Donald McF.....	Whitestone.	Buisson, William.....	Sudbury.
Ansley, William.....	Thessalon.	Borrett, James A.....	Sault Ste. Marie.
Argue, W. A.....	Kearney.	Bliss, C. Lidden.....	Sudbury.
Almers, John.....	Kenora.	Bray, James.....	Kinmount.
Allard, Telephone Jos.....	W. Fort William.	Bremner, George.....	Arnprior.
Andrews, Geo. E.....	Massey.	Bromley, Samuel.....	Pembroke.
Brophy, Michael Patrick.....	Massey Station.	Brown, A. C.....	Fitzroy Harbour.
Boland, Abraham.....	Cartier.	Berlinquet, Julius.....	Opimicon, Que.
Brown, Singleton.....	Bracebridge.	Blastorah, Fred L.....	Harwood.
Barry, Thomas James.....	Hastings.	Burns, Clifton H.....	Little Current.
Blanchet, Paul Fred'k.....	Ottawa.	Beaumont, Ernest.....	Parry Sound.
Bird, W. S.....	Parry Sound.	Beattie, Alex.....	Whitney.
Bayley, James T.....	Gravenhurst.	Brennan, Reginald.....	Gravenhurst.
Bell, Henry.....	Ottawa.	Boyd, George.....	Gravenhurst.
Beach, Herbert Mahlon.....	Ottawa.	Bissell, Geo. Thomas.....	Trenton.
Barry, Thomas.....	Millbridge.	Baxter, Richard.....	Deseronto.
Beatty, W. R.....	Parry Sound.	Breeaugh, Edward.....	Deseronto.
Brooks, Frederick Wm.....	Mackay's Station.	Boyd, Geo. A.....	Thessalon.
Brown, Robt. D.....	Port Sidney.	Buchan, Frederick.....	Arnprior.
Breed, Arthur G.....	Penetanguishene.	Bradbury, Kerwood.....	Blind River.
Barnes, Thomas Geo. Lee.....	Muskoka Mills.	Belanger, John B.....	Mattawa.
Buchanan, Robert.....	Coldwater.	Bird, J. F.....	Bracebridge.
Beck, Jacob Frederick.....	Penetanguishene.	Beddome, W. E.....	Dryden.
Bird, Joseph Manly.....	Muskoka Mills.	Barrett, Patrick.....	Arnprior.
Boyd, John F.....	Thessalon.	Brundage, Alfred W.....	Pembroke.
Brandon, Martin W.....	Peterborough.	Brougham, Thomas.....	Eganville.
Bell, John C.....	Peterborough.	Blair, Robert I.....	Arnprior.
Bartlett, George W.....	Warren.	Benson, John W.....	Sturgeon Bay.

Appendix No. 12.—Continued.

LIST OF CULLERS.—Continued.

Beck, Chas. M., Jr.....	Penetanguishene.	Cochrane, George.....	Peterboro.
Beatty, W. J.....	Coldwater.	Coburn, John.....	Lindsay.
Burns, C. W., Jr.....	South River.	Crewe, Nathaniel.....	Bobcaygeon.
Bell, John Henry.....	Burk's Falls.	Cameron, Alexander.....	Norman.
Berry, Harold.....	Labelle, Q.	Chrysler, Frank R. L.....	Webbwood.
Black, George.....	Barwick.	Callaghan, Thomas, Jr....	Campbellford.
Bettes, John Hiram.....	Muskoka Mills.	Carson, Hugh.....	Kenora.
Brady, John.....	Renfrew.	Calder, George.....	Woodville.
Brown, James.....	Buckingham, Q.	Callaghan, Dennis.....	Campbellford.
Brooks, W. J.....	Blind River.	Corrigan, Robt. T.....	Emo.
Bertrand, Allan.....	Nairn Centre.	Cameron, John H.....	Kenora.
Brinkman, Alex. B.....	Sault Ste. Marie.	Carson, Melvin.....	Little Current.
Black, Jacob.....	Barwick.	Cameron, John K.....	Spanish River.
Beattie, W. J.....	Arnprior.	Cassidy, William.....	Little Current.
Bromley, William.....	Westmeath.	Coons, Geo. Washington	Peterboro.
Bissell, Hartie.....	Trenton.	Chisholm, Geo. Leopold...	Sault Ste. Marie.
Brown, Robert.....	Starrat.	Clark, Wm. J.....	Birkendale.
Beaton, Hugh.....	Waubauskene.	Carr, Herbert E.....	North Bay.
Bailey, Arthur.....	Parry Sound.	Cochrane, Alfred L.....	Muldoon, Que.
Burd, James Henry.....	Parry Sound.	Campbell, George.....	Fort Frances.
Bailey, Samuel James....	Orillia.	Chalmers, George James..	Peterboro.
Burton, Tinswood.....	Renfrew.	Caverly, David Charles...	Parry Sound.
Boyes, James.....	Huntsville.	Campbell, Archibald J....	Little Current.
Brown, John.....	Rockdale.	Close, John L.....	Arnprior.
Brennan, Edward Scott...	Sundridge.	Carmichael, Donald.....	Arnprior.
Bell, John Arguey.....	Klock's Mills.	Carty, John.....	Arnprior.
Bromley Edw. H.....	Pembroke.	Cleary, Patrick M.....	Arnprior.
Bliss, Lawrence E.....	Byng Inlet.	Callwell, James M.....	Callender.
Buee, Neil.....	Spanish Station.	Cushing, John J.....	Davidson, Que.
Brazziell, Leonard.....	Spanish Station.	Crebo, William.....	Thessalon.
Bowie, James.....	Bryson, Que.	Cullen, Michael J.....	Massey Station.
Barrie, Nicholas J.....	Ottawa.	Cuthbertson, William....	Arnprior.
Burke, J. D.....	Kenora.	Carss, Percy.....	Thessalon.
Bowen, Thomas.....	Deseronto.	Coghlan, Michael.....	Chapeau, Que.
Brown, James F.....	Baysville.	Cameron, Alexr. Gordon..	Beauchene, Q.
Blastorah, Bernard.....	Harwood.	Cassaday, W. W.....	Emo.
Brannan, William H.....	Pembroke.	Carter, Robert E.....	Fesserton.
Bromley, Thomas.....	Webbwood.	Coleman, Jos.....	Baysville.
Barr, J. C.....	Fort Frances.	Cardiff, Geo. McDougall...	Sudbury.
Bradley, J. M.....	Mine Centre.	Cameron, W. D.....	Kenora.
Burns, Dominick.....	Webbwood.	Crandal, F.....	Port Arthur.
Blakie, Campbell D.....	Fort Frances.	Campbell, James R.....	Eganville.
Bury, Henry J.....	Stratton.	Campbell, John A.....	Galleta.
Brown, R. A.....	Cartier.	Caillier, Hyacinth.....	Arnprior.
Brouse, Silas.....	Webbwood.	Chamberlain, Thomas....	Bobcaygeon.
Byrne, James.....	Kenora.	Cooper, David Allan.....	Millbrook.
Buchan, A.....	Ft. William.	Cox, Henry.....	Ballerica, Que.
Bailey, Alex.....	Thor Lake.	Currie, James.....	Ottawa.
Bennett, Oscar T.....	Little Current.	Clarkson, A. E.....	Midland.
Campbell, Robert John...	Flinton.	Clairmont, E.....	Gravenhurst.
Carpenter, John A.....	Arnprior.	Cameron, W. F.....	Sturgeon Bay.
Campbell, Alex. J.....	Trenton.	Connolly, David.....	Gravenhurst.
Carson, James.....	Bracebridge.	Campbell, P. C.....	Sault Ste. Marie.
Campbell, J. M.....	Bracebridge.	Cadenhead, Alexander...	Midland.
Campbell, Robert.....	Bracebridge.	Carpenter, R. J.....	Arnprior.
Clairmont, Joseph.....	Campbellford.	Christie, William Pringle.	Severn Bridge.
Clarkson, Robert J.....	Parry Sound.	Campbell, C. V.....	Sault Ste. Marie.
Carruthers, Aaron.....	Hintonburg.	Clegg, Samuel.....	Peterboro.
Calder, Wm. J.....	Bark Lake.	Clairmont, William L....	Gravenhurst.
Chew, Joseph.....	Gravenhurst.	Cook, Sydney P. W.....	Spanish Station.
Cole, James Colin.....	Ottawa.	Corrigan, John.....	Baysville.
Cameron, Wm.....	Collin's Inlet.	Chalmers, Alexander M....	Peterboro.
Cain, Robert.....	Midland.	Charlton, George A.....	Collingwood.
Crawford, Stephen W....	Thessalon.	Cahill, Thomas.....	Nosbonsing.

Appendix No. 12.—Continued.

LIST OF CULLERS.—Continued.

Chew, Manley	Midland.	Dillon, John	Calabogie.
Cooper, James Eddy	Saurin.	Durrell, Jos. Nelson	P't'ge du Ft., Q.
Cook, Reinhardt	South River.	Durrell, John	Callender.
Crowe, Cecil	Bobcaygeon.	Donally, Richard S.	Sudbury.
Callaghan, Denis	Trenton.	Devine, William	Cook's Mills.
Collins, James	Barryville.	Durrill, William	Nosbonsing.
Claffey, Edward D.	Fort William.	Draper, Patrick	Quyon, Que.
Coyne, Phin	Chelmsford.	Davis, J. P.	Bobcaygeon.
Constantine, Eudore	Blind River.	Dale, John Alexander	Birkendale.
Cameron, Ewan	Gordon Lake.	Dinsmore, Chas. L.	Huntsville.
Campbell, Daniel N.	Buck'gham, Que.	Drum, Patrick	Belleville.
Canniff, R. W.	Kenora.	Durham, Edgar S.	Rosseau.
Cassidy, S. C.	Dunchurch.	Duquette, Chas.	Webbwood.
Charleston, John Baptiste.	Ottawa.	Davis, William Albert	Bobcaygeon.
Comer, Billa F.	Tweed.	Dickson, Robert Alexander	Keene.
Carter, George	Sundridge.	Dawkins, John	Gravenhurst.
Corrigan, Robt. J.	Emo.	Doxsee, James E.	Gravenhurst.
Caswell, Grant	Coldwater.	Didier, L. P.	Aylmer, Que.
Caswell, Geo.	Coldwater.	Devine, Patrick J.	Sheenboro, Que.
Chemir, David A.	Pembroke.	Dinsmore, Richard	Huntsville.
Clairmont, Philadelp L.	Gravenhurst.	Dunn, Percy E.	Longford Mills.
Crowe, Edgerton	Bobcaygeon.	Duval, Chas.	Halfway.
Castonquay, A. C.	Chelmsford.	Donlevy, James	Calabogie.
Clark, Donald Allan	Port Arthur.	Doris, Patrick	Peterborough.
Charette, Herbert	Devlin.	Doris, John	Peterborough.
Christie, Uriah W.	Fort Frances.	Donahue, Michael	Erinsville.
Clark, Joseph C.	Fort Frances.	Doran, W.	Belleville.
Crowe, Leslie	Bobcaygeon.	Dickson, Robert R.	Kippewa, Que.
Campbell, Duncan W.	Stewartville.	Donlevy, Wm. C.	Rockcliffe.
Callahan, Thomas N.	Arnprior.	Duff, Chas. A.	Stewartville.
Clements, Albert James ..	Bent River.	Dean, James C.	Kenora.
Carney, Albert	Sault Ste. Marie.	Duff, Peter A.	Claybank.
Collins, Arthur	Massey Station.	Duncan, Downey	Rainy River.
Carter, George	Lavelle, Que.	Dougherty, J. M.	Fort Frances.
Chitty, Alfred E.	Kenora.	Dunn, John F.	Spanish Mills.
Cardiff, Richard J.	Arnprior.	Dyke, Morris F.	Blind River.
Conway, Thomas	Barry's Bay.	Devitt, Frank	Dinorwic.
Costello, Thomas M.	Antrim.	Dickie, David	Port Arthur.
Cross, R. J.	Silver Islet.	Dupuis, Alfred	Keewatin.
Clark, R. H.	Port Arthur.	Devlin, Samuel	Spanish Mills.
Clark, Wm. R.	Port Arthur.	Dougherty, W. H.	McLaren's Bay.
Coombs, A. B.	Bracebridge.	Duffy, William A.	Callender.
Cameron, A. F.	Emo.	Duncan, Edward J.	Sturgeon Falls.
Campbell, J. S.	Fort Frances.	Dennie, Frank	Capreol.
Clearihue, Geo. A.	{ 784 Hubert St., Montreal, Que.	Enlaw, Oliver	Campbellford.
Cuddihy, J. T.	Pembroke.	Ebert, Andrew P.	Pembroke.
Cameron, Ronald	Ignace.	Ellis, Alexander	Arnprior.
Cole, J. E.	Kenora.	Ellis, John	Westmeath.
Currie, J. E.	Kenora.	Errington, Joseph	Sundridge.
Clempson, A. J.	Dryden.	Eddington, Henry John	Parry Sound.
Didier, Hector	Mattawa.	Enright, Daniel	Port Arthur.
Doran, Frank	Barryvale.	Eager, James	Parry Sound.
Dunning, E. Percival	Parry Sound.	Elliott, Porter P.	Mine Centre.
Duff, R. J.	Arnprior.	Elliott, William	Cache Bay.
Durrill, John W.	Ottawa.	Edgar, J. E.	Kenora.
Dickson, John	Sundridge.	Elliott, George E.	Peterborough.
Dickson, James L.	Michipic'ten Hr.	Edwards, Joseph K.	Gillies Depot.
Dobie, Harry	Sault Ste. Marie.	Eldridge, Robert	Fort Frances.
Deacon, Charles	Sault Ste. Marie.	Fraser, John A.	Kenora.
Danter, R. W.	Parry Sound.	Ferguson, Wm. H.	Red Bay.
Doyle, T. J.	Eau Claire.	Forbes, Chris. McKay	McLean's Depot.
Dobie, Alexander R.	Blind River.	Fitzgerald, E. Clair	Parry Sound.
Darling, J. M.	B'ng Inlet.	Farrell, W. H.	Ironside, Que.
		French, Lewis William	Wisawasa.

Appendix No. 12.—Continued.

LIST OF CULLERS.—Continued.

Fraser, William A.....	Mattawa.	Green, Forman A.....	Gilmour.
Finerty, Patrick.....	Rochfort.	Green, Samuel E.....	Parry Sound.
Farnand, Frank.....	Diamond.	Grant, John.....	Flinton.
Fulton, Philip S.....	Spanish Station	Green, Arthur.....	Ottawa.
Fitzgerald, Ulyot C.....	Parry Sound.	Green, Norman McL.....	Bancroft.
Fenn, George.....	Bracebridge.	Gillis, John J.....	Whitefish.
Fortune, Owen.....	Trenton.	George, R. W.....	Parry Sound.
Fraser, David.....	Norman.	Gardiner, John.....	Parry Sound.
France, John.....	Collin's Inlet.	Golden, Frank J.....	Trenton.
Ferguson, Ernest A.....	Baysville.	Garson, Robert.....	Thessalon.
Ferguson, Alpen.....	Mattawa.	Gropp, August.....	Penetanguishene.
Ford, John William B....	P'r'tage du Ft., Q.	Grozelle, Antoine D....	Muskoka Mills.
Ford, Charles.....	Wahnapiatae.	Goulais, James.....	Peterborough.
Findlay, J. H.....	Braeside.	Grayson, Charles.....	Keewatin.
Fraser, James.....	Renfrew.	Gladstone, Harry E.....	Cook's Mills.
Fairen, Francis.....	Peterborough.	Guertin, Oliver.....	Biscotasing.
Faulkner, Jos.....	Fesserton.	Gelinas, Frank.....	Hull, Que.
Fraser, Alexander, Jr.....	Westmeath.	Gwynne, John.....	Hawkesbury.
Fairbairn, William.....	Calabogie.	Gray, Frederick M.....	Brule Lake.
Fraser, William A.....	Pembroke.	Graham, Edward G.....	Wahnapiatae.
Fraser, Foster.....	Pembroke.	Griffin, James.....	Spanish River.
Fraser, Wm.....	Little Current.	Gordon, Alexander B....	Pembroke.
Fraser, Hugh Alexander..	Pembroke.	Gareau, Noah J.....	Pembroke.
Flaherty, John.....	Lindsay.	Gillies, D. A.....	Carleton Place.
Fisher, Wm.....	Trenton.	Gilligan, Edward.....	Mattawa.
Fox, Thomas.....	Deseronto.	Gladman, Charles.....	Parry Sound.
Fallis, James W.....	Sturgeon Bay.	Garrow, John D.....	Ottawa.
Fairbairn, N. H.....	Webbwood.	German, William Burton..	Wahnapiatae.
Friel, John.....	Trenton.	Gordon, Robert W.....	Pembroke.
Fox, Charles.....	Trenton.	Guertin, Nelson.....	Petawawa.
Featherstonehaugh, W. H.	Penetanguishene.	Gardner, John.....	Kenora.
Friar, Schuyler.....	Westmeath.	Gunter, Peter M.....	Gilmour.
Farren, Joel.....	Savanne.	Glennie, William.....	Millbridge.
Fraser, Duncan.....	Big Forks.	German, Maurice J.....	Fenelon Falls.
Freestone, Walter.....	Burk's Falls.	Gillies, John A.....	Braeside.
Fraser, John.....	Bancroft.	Goddin, Edward.....	Griffith.
Fitzgerald, D. C.....	Spanish Station.	Grant, Joseph.....	Eganville.
Foster, Wm. C.....	Searchmont.	Gilmour, James B.....	Braeside.
Frazer, Jas. C.....	Spanish Mills.	Gorman, Joseph P.....	Sault Ste. Marie.
Fremlin, H. P.....	Richards' Land'g.	Gordon, Thomas A.....	Hali's Bridge.
Foster, Ed. G.....	Sault Ste. Marie.	Gray, Albert H.....	Biscotasing.
Farrel, Peter M.....	Whitefish.	Gadway, John.....	Parry Sound.
Fairhall, Edward.....	Whiteside.	Garrow, Edward.....	Webbwood.
Fraser, Levi.....	Bracebridge.	Golding, William.....	Dorset.
Fiddes, James.....	Rainy River.	Gillies, Harry.....	White Lake.
Frasley, Frank.....	Orillia.	Gordon, Herbert C.....	Nelson.
Fisher, George.....	Sault Ste. Marie.	Gillespie, M. H.....	Cook's Mills.
Filiatrault, J. A.....	Blind River.	Griffin, William.....	Huntsville.
Farrier, John William....	Chapeau.	Ganton, David.....	Trout Creek.
Finney, Benjamin B.....	Fort Frances.	Graham, George L.....	Arnprior.
Follis, Frank C.....	Hawkesbury.	Graham, Frederick S....	Arnprior.
Fortune, Percy H.....	Blind River.	Gill, Cuthbert.....	Orillia.
Fraser, Wm. Foster.....	Sault Ste. Marie.	Graham, James Robert...	Kenora.
Fraser, Allan H.....	Thessalon.	Graham, Thomas Jordan..	Byng Inlet.
Farquharson, James.....	Tomiko.	Gaudaur, Antoine Daniel..	Orillia.
Fink, John.....	Mattawa.	Gorman, Patrick.....	Eganville.
Fletcher, Nicol B.....	Parry Sound.	Guy, Charles.....	Fort Frances.
Fraser, Darlington.....	Pembroke.	Graham, George H.....	Gillies Depot.
Faulkner, Wm.....	Dryden.	Greer, George P.....	Port Arthur.
Griffith, Geo. F.....	Pembroke.	Gill, Charles.....	Fort Frances.
Graham, John.....	Arnprior.	Gamey, William H.....	Englehart.
Golden, John.....	Gilmour.	Gorman, Michael J.....	Diver.
Gunter, Henry M.....	Trenton.	Grier, Roy B.....	Kenora.
Goltz, Ernest.....	Bardsville.	Greer, Samuel H.....	Gore Bay.

Appendix No. 12.—Continued.

LIST OF CULLERS.—Continued.

Gilbert, Sidney N.....	Rainy River.	Horne, John T.....	Fort William.
Guilbeault, A. T.....	Klock's Mills.	Hamilton, Chas. E.....	Kenora.
Gordon, J. B.....	Cache Bay.	Henderson, Leonard	Baysville.
Gorman, Bert.....	Kenney Siding.	Hunter, Thos.	Callender.
Hale, Thomas.....	Pembroke.	Hamilton, Robert J.....	Ottawa.
Hogan, Albert J.....	Sault Ste. Marie.	Hawkins, William A.....	Pembroke.
Hagen, Edmund G.....	Little Rapids.	Herring, Edward C.....	Sebright.
Hagen, Wilson.....	Thessalon.	Hatch, J. W.	Dryden.
Hurd, Cyrus	Parry Sound.	Hoard, Wm. Paris	Emo.
Henderson, Albert E.....	Burford.	Hartman, W. R.....	Blind River.
Hale, John B.....	Sault Ste. Marie.	Hill, Ernest L.....	Hawkesbury.
Hickerson, Melvin T.....	Fort Frances.	Hall, Samuel S.....	Marmora.
Howe, George H.....	Fort Frances.	Hasleton, Constantine	Killaloe.
Hartt, James.....	Gilmour.	Hamilton, A. J	Spragge.
Hayes, James	Enterprise.	Heggart, E. C.	Trout Mills.
Humphrey, T. W.....	Gravenhurst.	Hunt, Ronald E.....	Massey.
Huckson, A. H.....	French River.	Hurd, Asahel	Parry Sound.
Handley, Robert	Douglas.	Howe, Peter	Fort Frances.
Howe, Alexander	Queensborough.	Hammond, Samuel H.....	Fort Frances.
Hurd, Edwin	Hurdville.	Hunt, Alex. D.....	Pearl River.
Huff, J. S. Morris.....	Arnprior.	Home, John F.....	Keewatin.
Halliday, Robert J.....	Lindsay.	Hay, Benjamin	Port Arthur.
Hutton, John	Hutton House.	Hogan, John	Savanne.
Hutchinson, Wm. E.....	Huntsville.	Hargis, Thomas	Port Arthur.
Hogarth, Joseph Rowan.....	Pembroke.	Hartt, I. B.....	Orillia.
Humphrey, John	Gravenhurst.	Harkins, J. J.....	Keewatin.
Hill, Joshua	Midland.	Hammond, Henry	Dryden.
Hall, David	Lovering	Irving, Thos. H.....	Parry Sound.
Hartley, Charles	Peterborough.	Irwin, Eli	Kenora.
Hawkins, Henry Chas.....	Blind River.	Irving, Edward C.....	Kenora.
Hines, Philip Wallace.....	Huntsville.	Johnston, Ralph E.....	Port Arthur.
Hudson, John Lewis	Combermere.	Johns, Frank A.....	Toronto.
Hurdman, William H.....	Ottawa.	Jackson, Robert	Brechin.
Hughes, John	North Bay.	Johnson, Finlay	Bracebridge.
Howie, R. G.....	New Liskeard.	Jones, Albert	Victoria Harbor.
Helferty, Dennis	Eganville.	Johnson, Thomas	Bobcaygeon.
Hamilton, Robert	Kenora.	Johnston, Archibald M.....	Norman.
Hoppins, Abiram	Kingston.	Julien, Charles	Trenton.
Hoppins, Densmore	Kingston.	Junkin, Henry	Marmora.
Haystead, John	Parry Sound.	Johns, Frank	Nipiss'g Junet'n.
Henderson, John Irwin.....	Bobcaygeon.	Jessup, Edward D.....	Cache Bay.
Hartley, William.....	Millbridge.	Johnson, Frank N.....	Ottawa.
Higgins, John C.....	Peterborough.	Johnston, John	Peninsular Lake.
Harrison, John, Jr.....	Pembroke.	Johnson, S. M.....	Arnprior.
Hawkins, E.	La Breton Flats.	Jones, Frederick James.....	Flinton.
Henderson, Charles	Bracebridge.	Johnston, William A.....	Castleford.
Halliday, Frank	Parry Sound.	Jervis, Henry	Wisawasa.
Hammond, W.....	Orillia.	Jones, William	Fenelon Falls.
Hall, Charles Asa	Penetanguishene.	James, Martin	The Flats.
Hearl, John	Callender.	Johnston, James	Fort Frances.
Howe, Isaac	Fort Frances.	Johns, Alexander	Callender.
Halliday, James	Springtown.	Jackson, John A.....	Barwick.
Hurdman, J. A.....	Ottawa.	Johnson, Thomas	Fort Frances.
Hawkins, Stonewall J.	Meldrum Bay.	Johnston, George N.....	North Bay.
Hinchcliffe, William.....	Gunter.	Jamieson, John	Fort Frances.
Henderson, Arthur	Baysville.	Jones, Wellard	Ignace.
Hillis, James M.....	Sutton West.	Kintree, Stuart	Little Rapids.
Harris, Wm., Jr.....	Day Mills.	Kerby, John	Belleville.
Hogg, W. J.....	North Bay.	Kennedy, Robert	Marmora.
Hoxie, E. P.....	Katrine.	Kirby, Louis Russell	Ottawa.
Hawkins, Walter	Pembroke.	Kennedy, Timothy	Enterprise.
Howard, James	Eganville.	Kirk, Henry	Trenton.
Howard, William	Baysville.	Knox, Milton	Ottawa.
Hogan, Enos W.....	Savanne.	Kinsella, Michael Pierce.....	Trenton.

Appendix No. 12.—Continued.

LIST OF CULLERS.—Continued.

Kitchen, D.....	French River.	Lowe, Thomas A.	Renfrew.
Kelly, Jeremiah	Sudbury.	Livingston, Robert M. . .	Huntsville.
Kelly, Ferdinand	Mattawa.	Londry, William E.	Sault Ste. Marie.
Kennedy, T. J.	Arnprior.	Labelle, James	Waltham, Que.
Kenning, Henry	Pembroke.	Labelle, Eli	Waltham, Que.
Kirby, D. F.	Belleville.	Ladurante, J. D.	Ottawa.
Kirkpatrick, David	Lindsay.	Ludgate, Theodore	Peterborough.
Kean, John F.	Orillia.	Lucas, Frank	Sault Ste. Marie.
Kellett, Fred	Keewatin.	Lunam, Duncan	Collfield, Que.
Kelly, Michael J.	Baysville.	Lott, George	Trenton.
Kirk, William James	Webbwood.	Lawrie, John D.	Parry Sound.
Kerr, E. G.	Thessalon.	Lovering, George Francis.	Coldwater.
King, Napoleon	Mattawa.	Lucas, R. G.	Christina.
Kean, B. F.	Orillia.	LeBlanc, Edmund C.	Chapleau.
Kemp, Orval Wesley	Trenton.	Lavigne, John	Aylmer, Que.
Kirk, Charles Barron	Queensborough.	Landell, Charles S.	Huntsville.
Kingsland, W. P.	Ottawa.	Long, Henry Elisha	Mattawa.
Kerr, John B.	Arnprior.	Lynch, W. H.	Collingwood.
Kennedy, Walter	Arnprior.	Laplane, Francis	Byng Inlet.
Kennedy, John	Pembroke.	Lindsay, James	Arnprior.
Knox, Wm. M.	Fesserton.	Labelle, Michael	Arnprior.
Kingston, Robert	Wisawasa.	Legree, John	Dacre.
Kearnan, Robert	Blind River.	Legree, James L.	Calabogie.
Kearney, Michael John	Buckingham, Qu.	Leigh, John Chas.	Gravenhurst.
Kendrick, John	Burk's Falls.	Lloyd, Edward B.	King.
Kendrick, John L.	Burk's Falls.	Lemyre, Bruno	Gravenhurst.
Kennedy, John W.	Ottawa.	Lavelle, Charles H.	Canoe Lake.
Kelly, James F.	Trout Creek.	Lyons, James	Waltham Sta., Q.
Kauffman, Julias	Blind River.	Ledwood, Charles	Ottawa.
Kennedy, Sylvester	Brule Lake.	Levelle, Emrey	Waltham Sta., Q.
Kernahan, George A.	Barwick.	Little, Theo.	Kenora.
Kehoe, Martin	Huntsville.	Lehman, Joseph	Stratton Station.
Kennedy, Daniel J.	Spanish.	Lafare, Mark	Cache Bay.
Kay, Arthur	Norman.	Leach, George	Vermilion Bay.
Kennedy, Frederick J.	Buckingham, Qu.	Lott, Angus M.	Spanish Mills.
Leannoth, Francis	Arnprior.	La Belle, Ambrose	Kenora.
Lee, James	Warren.	La Breen, Douglas	Kenora.
Lloyd, Alfred	Severn Bridge.	Lavelle, Michael J.	Blind River.
Lawrie, Frank A.	Parry Sound.	Lyleton, J. E.	Parry Sound.
Latimer, Jas.	Frank's Bay.	Lalor, William J.	Aspdin.
Lemyre, Middey	Campbellford.	Lalonde, Joseph Maxine.	Link.
Lutz, Jacob	Parry Sound.	Laderoute, Michael	Arnprior.
Luby, John E.	Ottawa.	Leroy, Levi H.	Port Arthur.
Law, Wm. J.	Markstay.	Lusigneau, Arthur	Pembroke.
Lummis, Daniel	Glanmire.	Link, John	Link P.O.
Lowe, W. C.	Port Arthur.	Love, B.	Port Arthur.
Londry, S. C.	Sault Ste. Marie.	Landry, Fred S.	Sturgeon Falls.
Lochnan, James	Ottawa.	Malloy Mark	Baysville.
Link, Henry W.	Ottawa.	Martin, Hugh	Sault Ste. Marie.
Ladarotte, John	Arnprior.	Miller, R. O.	Gravenhurst.
Lochnan, John	Aylmer, Que.	Morrison, James	Toronto.
Lozo, John	Trenton.	Murray, Frederick	Huntsville.
Loughrin, Lawrence	Pembroke.	Menzies, Archibald	Burk's Falls.
Linton, J. H.	Parry Sound.	Manning, James	Trenton.
Ludgate, James	Peterborough.	Martin, Philip	Stoco.
Lee, Robert	Huntsville.	Malone, Wm. Patrick	Ottawa.
Langford, Mark	Baysville.	Marsh, Esli Terrill	Trenton.
Letherby, Edwin	Midland.	Miller, John W.	Huntsville.
Leahy, Francis M.	Chapleau, Que.	Muchinbacker, Asa	Rousseau Falls.
Langford, Henry	Baysville.	Morris, Geo. F.	French Bay.
Lessard, Philip	Kenora.	Murray, George, Jr.	Waubushene.
Lovering, William James.	Coldwater.	Maughan, Joseph	Fort William.
Lane, Maurice	Bobcaygeon.	Margach, Wm. J.	Port Arthur.
Lenton, George	Peterborough.		

Appendix No. 12.—Continued.

LIST OF CULLERS.—Continued.

Murray, George, Sr.	Waubauskene.	Morrison, Donald	Reay.
Manice, Wm.	Peterborough.	Moore, Wm.	Bobcaygeon.
Murray, Wm.	Kenora.	Mutchenbacher, Herman ..	Rosseau Falls.
Morgan, Richard J.	Kenora.	Moore, Norman	Arnprior.
Magee, Thomas Arthur ..	Kenora.	Morley, John R.	Kenora.
Murdoch, James	Cook's Mills.	Mackay, J. A.	Big Forks.
Mulvahill, Wm.	Arnprior.	Miller, Robt.	Montreal.
Murphy, Arthur	Ottawa.	Mackey, Levi Ralph	Keewatin.
Mayhew, Jacob	Northcote.	Morley, Frank W.	Kenora.
Molyneaux, George	Parry Sound.	Madden, F. M.	Haileybury.
Milway, Joseph	Fort William.	Miller, Walter E.	Owen Sound.
Mackie, Nathan	Port Arthur.	Murray, Robt.	Berriedale.
Milne, Archie	Arnprior.	Mills, W. J.	Cache Bay.
Murray, James	Peterborough.	Martin, Oscar	Buckingham, Que.
Moore, James A. E.	Lakefield.	Margach, Jas. A.	Kenora.
Merkley, William A.	Ottawa.	Murray, Peter	Emo.
Murphy, Hugh R.	Ottawa East.	Macdermid, Harry	Sellwood Jct.
Murphy, W. J.	Arnprior.	Muckle, John	Keewatin.
Murray, William	Markstay.	Morel, H., Jr.	Mattawa.
Martin, Edgerton	Markstay.	Molyneaux, Harold	Parry Sound.
Mathieson, Archie	Fort Frances.	Marchildon, J. P.	Sturgeon Falls.
Moore, Henry R.	Lakefield.	Main, G. C.	Fort Frances.
Mickle, Chas. S.	Gravenhurst.	Marr, H. J.	Superior Jct.
Mullen, James	Webbwood.	Mathewson, O. R.	Blind River.
Morley, A. W.	Winnipeg.	McCaw, Joseph E.	Tweed.
Macdonald, James M.	North Bay.	McLaren, Peter	Kenora.
Money, Harry	Haileybury.	McGregor, Colin F.	Kenora.
Mather, Allen	Keewatin.	McKenzie, Robt.	Kenora.
Menzies, Alexander	Sault Ste. Marie.	McFadyen, A. J.	Bracebridge.
Munro, Peter P.	Commanda.	McCaulay, Thos. J.	Goulais Bay.
Mason, Benjamin	Westmeath.	McDonald, John C.	Spanish Mills.
Monaghan, John B.	Arnprior.	McKenzie, Alex E.	Ansonia.
Monaghan, M. J.	Arnprior.	McIntyre, John	Arnprior.
Mulvihill, John	Arnprior.	McDermott, Thos.	Orillia.
Moran, Andrew	Rockingham, Qu.	McDermott, Jas. E.	North Bay.
Mulvihill, Michael	Arnprior.	McCrinkle, Jas.	Sudbury.
Mann, John	Manitowaning.	McGhie, Chas. S.	Whitestone.
Marrigan, Richard	Deseronto.	McGenigal, John H.	Whitby.
Monaghan, John Dorland..	Deseronto.	McCart, Patrick	Arnprior.
Matheson, Wm.	Chelmsford.	McGrath, Thos. B.	Peterborough.
Munro, Alex. G.	Braeside.	McCormick, James J.	Trenton.
Murphy, Oliver A.	Marksville.	McCarthy, Wm.	Fenelon Falls.
Mellor, Charles	Port Arthur.	McAvoy, Owen	Campbellford.
Millions, Harry	Gillies' Depot.	McConnell, Lewis	Fesserton.
MacDonell, R. D.	Biscotasing.	McMullen, George	Spragge.
Milne, Fred.	Trout Mills.	McNab, Angus	Burnstown.
Milne, William H., Jr.	North Bay.	McColgan, C. H.	Quyon, Que.
Murphy, Dennis	Thessalon.	McCallum, Webster	Arnprior.
Mackie, Thomas	North Lake.	McFarlane, Robert L.	Warren.
Miller, P. H.	Blind River.	McCagherty, Robert E. ..	Westmeath.
Munro, Philip	Braeside.	McNab, Archie	Calabogie.
Mangan, Patrick	Arnprior.	McDonald, Malcolm	Spragge.
Marcil, Peter	Ottawa.	McIvor, J. A.	Fort Frances.
Main, Samuel	Spanish Station.	McCulloch, M.	Kenora.
Morley, Charles	Huntsville.	McDonagh, Rod	Callender.
Moore, David Henry	Peterborough.	McManus, James	Arnprior.
Murphy, John	Arnprior.	McKinley, J. H.	Curran.
Mathieson, Daniel	Chelmsford.	McPherson, Jas. S.	Rama.
Milne, Wm.	Ethel.	McKinley, Edward C.	Toronto.
Mangan, Charles	Burk's Falls.	McClelland John	Parry Sound.
Mooney, Lincoln	Orillia.	McFarlane, J. W.	Cache Bay.
Mangan, John	Arnprior.	McDonald, Roderick	Pembroke.
Mooney, Thomas	Kingston.	McCormack, Wm.	Pembroke.
Mason, Robt. T.	Rochesterville.	McCreary, William	Arnprior.
Moore, Wm. John	Gravenhurst.	McCuaig, James C.	Bryson.

Appendix No. 12.—Continued.

LIST OF CULLERS.—Continued.

McColman, Peter	North Bay.	McLean, John	Blind River.
McLeod, James D.	Gravenhurst.	McLeod, Norman	Garden River.
McCrimmon, N. K.	Blind River.	McLean, James	Blind River.
McCreary, James, Jr.	Arnprior.	McNally, J. A.	Desbarats.
McPhee, Hugh	Byng Inlet.	McNab, Alexander	Arnprior.
McCudden James	Arnprior.	McFarlane, Alexander	Renfrew.
McLachlin, J. A.	Arnprior.	McFarlane, J. D.	Stewartsville.
Macpherson, John	Ottawa.	McFarlane, Duncan	Renfrew.
McEachren, John A.	Gravenhurst W	McKendry, Wm. B.	Arnprior.
McLeod, Dugald	Gravenhurst.	McPhee, Hugh	Renfrew.
McClelland, R. H.	Parry Sound.	McPhee, John	Arnprior.
McEvoy, Frank	Campbellford.	McLachlin, Peter	Arnprior.
McDermott, Peter	Orillia.	McLachlin, Alexander	Arnprior.
McIlroy, John	Madoc.	Mackey, Edward	Arnprior.
McNab, Robert J.	Parry Sound.	McEwan, Henry	Trenton.
McFadden, James	Ottawa.	McDonald, Alfred	Peterborough.
McIntosh, James G.	Carleton Place.	McGeary, John J.	Sundridge.
McInnis, Hector D.	Bracebridge.	McDonald, Archibald W.	Gilmour.
McKinnon, Malcolm	Bracebridge.	McGaw, John Gillen	Queensborough.
McLean, Daniel	Bracebridge.	McCauley, Barney	Trenton.
McKinnon, Archie J.	Bracebridge.	McDougall, James T.	Klock's Mills.
McKay, D. C.	Baysville.	McInenly, Thomas	Quebec, Que.
McDonald, James	Parry Sound.	McBride, Archibald	Arnprior.
McPherson, Allan	Longford.	McFarlane, Robert L.	Arnprior.
McDonald, James P.	French River.	McGowan, Wm.	Parry Sound.
McFarlane, Jos. C.	Port Severn.	McLachlin, Norman	Arnprior.
McNabb, Alexander	Thessalon.	McDonald, Laughlin	Pendleton.
McGillivray, Archibald ..	Port Arthur.	McIvor, William J.	Collin's Inlet.
McGrane, Edward	Lindsay.	McKee, John P.	Sturgeon Falls.
McLeod, Donald, Jr.	Keewatin.	McGowan, Thomas	Parry Sound.
McDonald, Hector R.	Thessalon.	McDermot, Patrick	South River.
McDougall, Duncan	Bracebridge.	McKay, Angus	South River.
McNabb, Alexander D.	Warren.	McDonald, A. J.	Longford.
McCormack, John C.	Sudbury.	McInnis, Angus D.	Gravenhurst.
McNamara, John	Byng Inlet.	McKendry, Alexander	Waubauskene.
McGillivray, Duncan D.	Algoma Mills.	McGuire, Timothy	North Bay.
McIntyre, Daniel A.	Klock's Mills.	McGrath, John	Peterborough.
McNamara, Lewis	Klock's Mill.	McWilliams, Jno. Bannon.	Peterborough.
McDonald, Sydney C.	Mattawa.	McCagherty, Patrick	Westmeath.
McGurn, John J.	Buckingham, Qu.	McKendry, Daniel	Arnprior.
McKeown, Jno. Joseph....	Port Arthur.	MacDonald, D. F.	Parry Sound.
McNeel, David	Sault. Ste. Marie.	McManus, Thomas J.	Renfrew.
McEwan, Andrew	Thessalon.	Macfarlane, David R.	Ottawa.
McCool, Christopher L.	Cartier.	McColgan, Edward	Quyon, Que.
McCollom, Donald	Arnprior.	McKay, John	Emo.
McDowell, Wm.	Cache Bay.	McKinnon, William	Kenora.
McConnachie, Roy Stewart	Huntsville.	McKittrick, Frank R. F.	Kenora.
McDonnell, J. K.	Kenora.	McMichael, Charles	North Seguin.
McDonald, Alex. J.	Vermilion Bay.	McIlroy, Thomas David.	Madoc.
McKay, D. A.	Rainy River.	McDonald, Wm. Henry	Trenton.
McMillan, James	Kenora.	McGaw, Wm. Thomas	Callender.
McPhee, Ronald	Bracebridge.	McMillan, L.	Callender.
McKay George Donner	Dorset.	McDermott, John L.	Orillia.
McWilliams, Maxwell		McDonald, Chas. M.	Pembroke.
Theodore	Peterborough.	McPhee, Benjamin	Pembroke.
McLeod, John	Keewatin.	McGee, John Edward	Parry Sound.
McPherson, George	Keewatin.	Macfarlane, Mack	Arnprior.
McDougall, John D.	Kenora.	MacCallum, Alexander	Braeside.
McGregor, Duncan	Burnstown.	McRae, Farquhar	Kenora.
McLean, Peter W.	Sand Point.	MacCallum, Albert	Arnprior.
McNichol, John	Sudbury.	McGonigal, John	Arnprior.
McInnis, D. E.	Cache Bay.	McConachie, John	Huntsville.
McLaughlin, Samuel	Waubauskene.	McKay, D. G.	Kenora.
McCollam, John	North Bay.	McDonald, James	Peterborough.
McManus, John C.	Arnprior.	McCulloch, John L.	Lonsdale.

Appendix No. 12.—Continued.

LIST OF CULLERS.—Continued.

McConnell, James	Mine Centre.	O'Connor, John.....	Hintonburg.
McIntyre, William John ..	Port Arthur.	Oliver, Darcy.....	Wahnapiatae.
McDonald Allen	Big Forks.	O'Connor, Wm.....	Nosbonsing.
McLay, Albert.....	Devlin.	O'Neil, James W.....	North Bay.
McQuarrie, Daniel.....	Fort Frances.	O'Donnell, Wm.....	Penetanguishene.
McNaughton, Daniel.....	Bracebridge.	Owens, Richard.....	Basin Depot.
McCagherty, William E....	Westmeath.	O'Reilly, Patrick.....	Cartier.
McDonald, John D.....	Mattawa.	O'Neill, Mark.....	Renfrew.
McCagherty, Joseph T....	Westmeath.	Orrill, John.....	Trenton.
McAdam, Arch H.....	Quyon, Que.	O'Neill, Patrick.....	Bancroft.
McMurphy, Dugald, Jr....	Kenora.	Orde, Francis W.....	Kenora.
McCall, Alfred.....	Kenora.	O'Driscoll, Joseph.....	Sault Ste. Marie.
McRitchie, William.....	Kenora.	O'Gorman, Peter.....	Blind River.
McRitchie, Malcolm.....	Kenora.	Ogden, L. M.....	Fort Frances.
McDonald, John Harold...	Rydal Bank.	Pigott, John.....	Fitzroy Harbour.
McAuley, William Davis...	Sault Ste. Marie.	Paul, Charles A.....	Sault Ste. Marie.
McCallum, Thomas.....	Fort William.	Patinson, Thos.....	Bracebridge.
McWhinney, Fred.....	Kenora.	Price, A. E.....	Arnprior.
McNairney, Hugh H.....	Sudbury.	Presley, J. F.....	Ashton.
McKelvie, William.....	Otter Lake Sta.	Power, James.....	Bobcaygeon.
McGovern, Frank.....	Sault Ste. M.	Patzel, Adolph.....	Arnprior.
McCallum, Gordon.....	Fort Frances.	Plaunt, William B.....	Eganville.
McCallum, Henry.....	Fort Frances.	Plaunt, Joseph.....	Eganville.
McLaughlin, Russell.....	Spanish Mills.	Porter, Charles C.....	Longford.
McAdam, Miner S.....	Quio, Que.	Preston, R. E.....	Kenora.
McDougall, David A.....	Nesterville.	Petrie, Geo. A.....	Fergus.
McLeod, William A.....	Manitowaning.	Pomeroy, Peter.....	Trenton.
McKee, D. A.....	Wylie.	Perry, Pringle K.....	Byng Inlet, N'th.
McKay, Norman.....	Fort Frances.	Purcall, W. G.....	Ottawa.
McIntosh, Wm.....	Biscotasing.	Purvis, John.....	Parry Sound.
McMahon, Edwin.....	Nesto P.O.	Porter, James.....	Uphill.
McGowan, Thos.....	Parry Sound.	Pearson, John James....	Lindsay.
McDonald, Norman.....	Keewatin.	Penney, Chas. G.....	Cache Bay.
McLeod, John C.....	Port Arthur.	Pennock, James P.....	Hardwood Lake.
McIntosh, Herbert.....	Biscotasing.	Purdy, John A.....	Uxbridge.
McDonald, Thos.....	Kenora.	Playfair, R. J.....	Blind River.
McCool, Daniel.....	Sudbury.	Paterson, John.....	Wahnapiatae.
Nescott, George.....	Kenora.	Paterson, Alexander....	Orillia.
Newton, Frank.....	Gravenhurst.	Parke, James.....	Gravenhurst.
Newburn, Wm.....	Parry Sound.	Parquette, Oliver.....	Webbwood.
Niblett, James.....	Arnprior.	Palmateer, Sherman....	Gravenhurst.
Nisbett, Robert.....	Osceola.	Paget, George.....	Huntsville.
Nevison, Herbert.....	Kenora.	Pounder, Joseph.....	Westmeath.
Nicholson, John.....	Owen Sound.	Pell, Richard D.....	Arnprior.
Newall, John H.....	Parry Harbour.	Perry, Frederick.....	Port Arthur.
Nolan, John.....	Gravenhurst.	Paget, Charles Edward...	Novar.
Newton, Charles W.....	Victoria Harbour.	Porter, Thos. Robt. Mark.	Dorset.
Nent, Charles.....	Vermilion Bay.	Pountney, E. J.....	Arnprior.
Needham, John G.....	Pakenham.	Pyburn, David J.....	Dorset.
Netterfield, David.....	John's Island.	Purdy, Geo.....	Hintonburg.
Nault, James.....	Fort Frances.	Playfair, Andrew Wm....	Sault Ste. Marie.
Norgate, Chas.....	Dryden.	Pipe, Taylor.....	Haileybury.
Nash, John.....	Kenora.	Pipher, George E.....	Mowat.
Nesbitt, Thos.....	Kenora.	Pendee, David.....	Parry Sound.
Oullette, Joseph P.....	Cutler.	Piper, A. J.....	Blind River.
O'Neil, Thomas.....	Bancroft.	Paget, Alfred H.....	Ahmik Harbour.
O'Neill, Daniel H. H.....	Arnprior.	Powers, John J.....	Trout Mills.
O'Leary, Patrick J.....	Orillia.	Pigott, William D.....	Fitzroy Harbour.
Oliver, Charles R.....	Fesserton.	Potts, Cyril.....	North Lake.
Overend, George J.....	Lonford Mills.	Pilkey, William.....	La Vallee.
O'Brien, Andrew.....	Ottawa.	Pointer, Roy R.....	Pembroke.
O'Brien, Frank G.....	Arnprior.	Piper, Roy.....	Blind River.
Oliver, J. A.....	Fort William.	Pehill, Walter.....	Dryden.
Owen, W. J.....	Wabigoon.	Palmer, Fred.....	Blind River.

Appendix No. 12.—Continued.

LIST OF CULLERS.—Continued.

Quinn, William.....	Peterborough.	Rooksby, Wm.	Campbellford.
Quigley, Hugh.....	Penetang.	Ramesbottom, Robt.	Byng Inlet.
Quirk, Thomas J.....	Petawawa.	Roy, Lewis	Arnprior.
Quance, Louis F.....	Berriedale.	Riddell, Horace A.	Galetta.
Robertson, D.....	Kenora.	Rowan, A. L.	Sault Ste. Marie.
Richardson, Fred'k George	Trenton.	Ritchie, James A.	Spragge.
Richards, Richard	Tamworth.	Ross, George Joseph	Schrieber.
Riddell, Geo. Alexander ...	Rochesterville.	Rowe, Frank E.	Hymers.
Robertson, Lewis McLean...	Dunchurch.	Regmibal, J. Hector	Larchwood.
Robinson, Wm. F.	Bobcaygeon.	Reid, William T.	Fort Frances.
Reamsbottom, Wm.	Mattawa.	Ross, Sidney	Fort William.
Richey, Evan	Brentwood.	Robinson, Thos.	Kenora.
Randall, Lewis G.	French River.	Robertson, J. D.	Kenora.
Richardson, Chas. Marvyn	Trenton.	Richardson, C. R.	Fort Frances.
Rochester, Daniel Baillie..	Ottawa.	Richey, A. W.	Sudbury.
Riddell, James	Ottawa.	Robinson, W. J.	Dryden.
Rice, Asa S.	Hull, Que.	Smith, M. D.	Fort William.
Roberts, T. A.	Huntsville.	Scanlan, William	Enterprise.
Ross, Andrew	Longford Mills.	Sutherland, D. H.	Gravenhurst.
Rose, Donald M.	Kenora.	Spanner, John	Huntsville.
Rawson, Charles Edward..	Coldwater.	Shier, James D.	Bracebridge.
Ross, George	Waubauskene.	Spooner, W. R.	Katrine.
Roberts, Percy T.	Keewatin.	Simpson, Alfred E.	Wakefield.
Ritchie, Wm. D.	Little Current.	Souliere, John B.	Ottawa.
Ramsay, Robert	Arnprior.	Shields, James A.	Carleton Place.
Ritchie, J. F.	Arnprior.	Spargo, George	Ottawa.
Ritter, Samuel G.	Ahmik Harbour.	Smyth, W. H.	Baysville.
Rothera, Charles F.	Sturgeon Falls.	Salmon, R. H.	Byng-Inlet North.
Ryan, Alfred	Byng Inlet.	Salmon, Alexander C. ...	Baysville.
Rogers, Fred	Sault Ste. Marie.	Stremer, A.	Ottawa.
Reid, George William	Fort Frances.	Shields, Frank A.	Parry Sound.
Robertson, John A.	Kenora.	Stapleton, John J.	Ogidakie.
Robinson, Wm.	Bobcaygeon.	Sloan, William H.	Fort Frances.
Reid, Joseph B.	Lindsay.	Smyth, Job E.	Cache Bay.
Ross, Walter M.	Ottawa.	Sage, Nelson	Muskoka Mills.
Ruttle, H. A.	Carleton Place.	Seymour, Edward	Whitefish.
Richards, Benedict	Ottawa.	Shaw, Thomas B.	Waubauskene.
Regan, John	Orillia.	Swanston, James	Peterborough.
Russel, Wm.	Pembroke.	Simpson, William	Hall's Bridge.
Ramsay, Charles	Sudbury.	Sadler, Thomas	Lindsay.
Russell, Corsan L.	Pembroke.	Smith, Patrick Albert ...	Norman.
Richards, Henry	Dacre.	Snaith, William J.	Mattawa.
Ryan, Wm.	Killaloe.	Sinn, William F.	Arnprior.
Reid, John P.	Spanish Mills.	Sheppard, Wm. Joseph ...	Waubauskene.
Ridley, Robert	New Liskeard.	Spears, Milton B.	Barry's Bay.
Riley, Charles W.	Hutton House.	Stevenson, Arthur	Peterborough.
Raymond, Morris T.	Spanish Mills.	Stein, Paul	Sault Ste. Marie.
Rooney, Wm. H.	Campbellford.	Shaw, Alfred	Thessalon.
Revell, J. O.	Dryden.	Sequin, Napoleon	Spanish Station.
Rankin, Anthony	Cache Bay.	Serim, Robert	Arnprior.
Ross, Angus	Orrville.	Sharp, James A.	Sudbury.
Robinson, Albert E.	Washago.	Shaneay, Harry S.	Cook's Mills.
Robinson, Edward	Washago.	Smith, Wm.	Ottawa.
Robinson, Thomas G.	Washago.	Stewart, Daniel	Braeside.
Raycroft, William T.	Sarnia.	Sheehan, Michael H.	Waubauskene.
Roberts, Ivor M.	Garden River.	Smith, Sydney H.	Bracebridge.
Revell, Lionel Oliver	W. Gravenhurst.	Stewart, James A.	Pembroke.
Regan, Judd Patrick	Orillia.	Sproule, Newton H.	Schomberg.
Robins, Etna Rosedale ...	Orillia.	Simmons, Alex.	Port Arthur.
Regan, John Jr.	Orillia.	Scott, Thomas	Parry Sound.
Ryan, James	Savanne.	Smith, Lawrence	W. Saginaw, Mich.
Rusk, Oscar W.	Cache Bay.	Shea, Stewart	Campbellford.
Robinson, Thos. Geo.	Bracebridge.	Sullivan, John	Sault Ste. Marie.
		Sinclair, Finlay	Sudbury.

Appendix No. 12.—Continued.

LIST OF CULLERS.—Continued.

Shiels, Henry F.	Cartier.	Smith, L. G.	Worthington.
Smith, Gideon Ousley ...	Burk's Falls.	Skead, Eric S.	Spanish Mills.
Smith, John Wallis	Thedford.	Sullivan, Michael	Barry's Bay.
Smith, Henry G.	Arnprior.	Swale, William	Gillies Depot.
Story, John A.	Ottawa.	Schreiber, C. C.	Sudbury.
Sweezy, Benjamin	Massey.	Taylor, Fred. L.	Parry Sound.
Sheppard, Charles H.	Coldwater.	Thomas, Griff J.	Thessalon.
Seabrook, Alex.	Fabre P.O.	Thomson, R. D.	Biscotasing.
Spreadborough, Newlands.	Little Current.	Tait, Thomas B.	Burk's Falls.
Sheffield, George	Chapleau.	Taylor, C. M.	Gravenhurst.
Sanders, William J.	Sudbury.	Thornton, W. D.	Longford Mills.
Sinclair, Armon D.	Arnprior.	Trussler, Gilbert	Trout Creek.
Smith, Sidney E.	Ottawa.	Thompson, Geo. S.	Lindsay.
Sleeman, Wm.	Rapid River.	Thompson, Fred. A. H. ..	Nosbonsing.
Sheehan, Peter F.	Loring (cane'd).	Thompson, Francis Hy. ..	Nosbonsing.
Sleeman, Geo.	Rapid River.	Train, A. C.	Rowan Mills.
Sims, Wm. K.	Sault Ste. Marie.	Turgeon, Geo.	Cook's Mills.
Skahill, Wm.	Blind River.	Thayer, Wm.	Sault Ste. Marie.
Shaw, George	Thessalon.	Thompson, Alexander W.	Arnprior.
Sarsfield, George Francis.	Sault Ste. Marie.	Taylor, Thos. G.	Gravenhurst.
Standish, Wm. H.	Batchawaning.	Trowse, A.	Arnprior.
Simpson, Wm. A.	Lakefield. [Bay.	Tucker, Louis A.	Fort Francis.
Scollard, Wm.	Young's Point.	Thompson, Daniel	P't'ge du F'rt, Q.
Shuttleworth, Alma	Trout Creek.	Thompson, Richard	Kenora.
Shanacy, Wm. J.	Spragge.	Thompson, Joseph H.	Bracebridge.
Seely, George	Arnprior.	Taylor, Edward A.	Westmeath.
Stewart, Alex. W.	Lanark.	Tait, Ralph	Arnprior.
Soreny, Wm.	Braeside.	Train, William	Burk's Falls.
Schneder, Frederick	Cache Bay.	Turner, Garvin F.	North Bay.
Smith, James D.	Kenora.	Tilson, Joseph	Burk's Falls.
Sullivan, James	Aylmer.	Tuffy, John	Cartier.
Scully, Cornelius	Whitney.	Thorpe, Thomas	Pembroke.
Savoy, Eutrope	North Bay.	Taylor, Charles E.	Gravenhurst.
Smith, Walter J.	Campbellford.	Tench, Arthur	Hekkla.
Seymour, John J.	Whitefish.	Tulloch, William A.	Sault Ste. Marie.
Smith, Alex. R. C.	Burk's Falls.	Taylor, Alex. M.	Burnstown.
Stewart, Richard M.	Chelsea, Que.	Toner, J. A.	P't'ge du F'rt, Q.
Souliere, John H.	Canoe Lake.	Thrasher, Henry G.	Pembroke.
Smith, Abraim G.	Quyon, Que.	Tooke, Frank	Bala.
Swallow, C. H.	Day Mills.	Thorburn, Donald James	Thessalon.
Strave, A. M.	Mine Centre.	Tetreault, Phllias	Tomiko.
Stewart, John	Fort Frances.	Tibbets, L. R.	Fort Frances.
Sullivan, George L.	Rainy River.	Tichborne, A. C.	Fort Frances.
Short, James	Kenora.	Thomson, Donald	Arnprior.
Shaw, Fred. Jason	Thessalon.	Udy, Dean	French River.
Short, Chas. J.	Kenora.	Urquhart, Elias	Gravenhurst.
Smith, David H.	Sudbury.	Urquhart, Andrew	Barrie.
St. Hillaire, George	Arnprior.	Vigras, Percy J.	Dufferin Bridge.
Souliere, Joseph C.	Cutler.	Vincent, Joseph	Warren.
Scott, J. C.	Fort Frances.	Vollin, Samuel	Nosbonsing.
Stewart, Frank E.	Crozier.	Vannier, Nelson Joseph ..	Hobcaygeon.
Sanders, Edward	Barwick.	Vincent, James	Fesserton.
Spence, William	Arnprior.	Vincent, Henry T.	Port Sidney.
Scott, Allan A.	Norman.	Vanderburg, Norman	Wisawasa.
Souliere, Max	Spanish Mills.	Valois, Armand	Mattawa.
Stewart, David	Cache Bay.	Villiers, Claude	Parry Sound.
Shaw, Donald	Keewatin.	Vanier, John	Sault Ste. Marie.
Smyth, C. W.	Fort Frances.	White, Thomas S.	Bracebridge.
Stewart, Jas. Max	Winnipeg, Man.	White, A. Thomson	Pembroke.
Stewart, Russell C.	Winnipeg, Man.	Watt, R. A.	Spanish.
Sisson, Heber P.	Hymers.	Wilkins, Hughes	Blind River.
Schultz, Albert	Pembroke.	Wallace, T. William	Blind River.
Spavin, John	Westmeath.	White, Joseph W.	Bracebridge.
Spense, Dalton	Parry Sound.	Watson, William	Huntsville.
Sparling, S. W.	Richan.	Webb, George W.	Parry Sound.

Appendix No. 12.—Concluded.

LIST OF CULLERS.—Concluded.

Wilcox, Thomas	Parry Sound.	Warrell, George	Powassan.
Wheeler, J. A. McL.	Tamworth.	Wells, George W.	Little Current.
Widdifield, C. H.	Pine Orchard.	Wilson, Frederick Gould.	Kenora.
Whitmore, Edgar	Rosseau Falls.	Wallace, John Thomas	Thessalon.
Wright, L. B.	Sault Ste. Marie.	Wilkins, George N.	Baysville.
Ward, Joseph W.	Ottawa.	Wylie, Byron M.	Webbwood.
Wilkinson, W.	French River.	White, Allan	Pembroke.
Waldie, John E.	Victoria Harbour.	Warner, Franklin H.	Fort Frances.
Wigg, Thomas G.	Thessalon.	Watts, George	Fort Frances.
Wall, Patrick B.	Cheboygan, Mich.	Wood, Thomas	Parry Sound.
Wells, John R.	Little Current.	White, William	Peterborough.
Whiteside, John	Huntsville.	Woods, A. L.	Kenora.
Watt, William	Peterborough.	White, John B.	Kippewa, Que.
Wilson, George	Lindsay.	Whelan, Peter M.	Renfrew.
White, Thomas	Parry Sound.	Wilson, David	Kearney.
Wood, William D.	Sault Ste. Marie.	Weston, Cecil	Dorset.
Watts, John J.	Fort Frances.	Wilkins, George E.	Dorset.
Webster, George F.	Fort Frances.	Woodcock, Edward	Brownhill.
Wright, Percy	Fort Frances.	Wilson, Fred.	Callender.
Watts, William B.	Fort Frances.	Wilson, Alexander R.	Thessalon.
Watson, William	North Bay.	Webster, Henry R.	North Lake.
Wagner, Fred.	Kenora.	Wallace, Fred. R.	Port Arthur.
Wainwright, Edward C.	Huntsville.	Wallace, Clayton	Blind River.
Wilson, Wm. James	Deseronto.	Wilson, Russell	Pembroke.
Weston, Frank R.	Midland.	Wheeler, George	Barwick.
White, James B.	Manitowaning.	Wall, G. L.	La Vallee.
Warren, Robert M.	Cache Bay.	Williams, Edward R.	Port Arthur.
Wilson, George A.	Balsam Hill.	Whalen, Jos.	Pembroke.
Welch, Harold	Milberta.	Younge, Harvey D.	Fort Frances.
Wilson, James A., Jr.	Webbwood.	Young, R. H.	Fort Frances.
Woods, John R.	Antrim.	Yuill, John Albert	Braeside.
Wardell, Ernest C. S.	Victoria Harbour.	Young, William	Severn Bridge.
Woods, Joseph F.	Roach's Point.	Young, A. J.	Cache Bay.
Whaley, Thomas	Huntsville.	Young, Samuel	Coldwater.
Webster, Wm. Alfred	Bracebridge.	Young, Patrick P.	Young's Point.
Wornsdorf, Fred. Gutlep.	Pembroke.	Young, Francis G.	Young's Point.
Warrell, Wm.	Trout Creek.	Yuill, Thomas	Arnprior.
Wims, Peter	Blessington.	Yuill, A. D.	Braeside.
Wickware, Philip Almont.	Cloyne.	Young, C. T.	Harvey.
Wilson, Edward	Deseronto.	Yuill, John Alex.	Arnprior.
Whelan, P. J.	McDougall.	Yuill, Archibald	Bracebridge.
Whyte, John, Thos. Goth.	Ottawa.	Yuill, William	Braeside.
Watterworth, J. A.	Sault Ste. Marie.	Young, Walter D.	Whitefish.
White, Wm. James	Muskoka Falls.		

Appendix No. 13.

LETTERS RECEIVED.

From Crown Land Agents	5,311
“ Mining Recorders	2,949
“ Crown Timber Agents	2,934
“ Homestead Inspectors	1,062
“ Fire Rangers	666
“ Superintendent of Algonquin Park	346
“ Superintendent of Quetico Park	130
Orders-in-Council	101
Telegrams	264
From all other sources	33,555
Total pieces incoming (Minister's office not included)	47,318

LETTERS SENT OUT.

Letters sent to Agents, Recorders, Inspectors, Rangers and Superintendents....	15,292
Letters to other sources	16,543
Circular letters (Timber Sales)	1,201
Maps and blue prints	2,511
Mining Reports to foreign countries	305
Mining Acts	1,215
Total pieces outgoing (Minister's office not included)	37,067
Postage for the year	\$2,951.46
New files made during the year	10,700
Account files made during the year (chargeable)	423
Account files made during the year (free)	266

S. K. BURDIN,
Chief Clerk.

ALBERT GRIGG,
Deputy Minister.

Appendix No. 14.

Statement showing the number of Locatees and of acres located; of purchasers and of acres sold; of lots resumed for non-performance of the settlement duties and of patents issued in Free Grant Townships during the year ending 31st October, 1916.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Baxter	Muskoka.	J. B. Brown, Bracebridge..	1	25	1	25	....	3
Brunel	"	"	1	100	...	...	1	5
Cardwell ....	"	"	...	...	1	1	...	3
Chaffey	"	"	1	100	...	...	1	1
Draper .....	"	"	...	...	...	...	...	...
Franklin	"	"	2	281	1	50	2	2
Freeman ....	"	"	...	...	...	...	...	1
Macaulay	"	"	1	200	...	...	2	...
Medora .....	"	"	...	...	...	...	...	3
Monck .....	"	"	...	...	...	...	...	1
Morrison ....	"	"	...	...	...	...	...	...
Muskoka	"	"	1	200	...	...	2	1
McLean	"	"	1	102	1	1	1	3
Oakley	"	"	3	384	1	3	2	2
Ridout .....	"	"	...	...	...	...	...	...
Ryde	"	"	2	311	...	...	1	1
Sherborne....	Haliburton....	"	4	376	...	...	1	1
Sinclair.....	Muskoka	"	2	400	...	...	4	5
Stephenson...	"	"	1	100	...	...	1	2
Stisted	"	"	1	99	...	...	1	2
Watt .....	"	"	...	...	...	...	...	1
Wood	"	"	1	203	15	41 $\frac{1}{2}$	1	20
Burpee	Parry Sound..	Miss I. M. Campbell, Parry	5	701	...	...	2	2
Carling	"	" Sound	2	200	1	10	1	2
Christie.....	"	"	3	282	...	...	2	1
Conger .....	"	"	...	...	1	12	1	2
Cowper .....	"	"	...	...	1	12	...	6
Foley .....	"	"	...	...	...	...	...	...
Ferguson ..	"	"	1	194	...	...	...	1
Hagerman ....	"	"	...	...	...	...	...	1
Harrison	"	"	1	241	4	58	...	11
Henvey	"	"	3	345	...	...	...	...
Humphrey ....	"	"	...	...	...	...	...	...
McConkey....	"	"	1	200	...	...	1	1
McDougall ...	"	"	...	...	...	...	...	1
McKellar ....	"	"	...	...	...	...	...	1
McKenzie ....	"	"	...	...	...	...	...	2
Monteith	"	"	2	287	...	...	1	...
Shawanaga ...	"	"	...	...	...	...	1	3
Wilson	"	"	1	148	2	15	...	1
Chapman	Parry Sound .	Dr. J. S. Freeborn,	1	116	1	8	1	3
		Magnetawan						
Croft	"	"	2	300	1	5	2	3
Ferrie .....	"	"	...	...	...	...	...	...
Gurd	"	"	4	467	...	...	2	2
Lount	"	"	4	485	...	...	2	1
Machar	"	"	8	1,192	3	104	8	5
Mills .....	"	"	...	...	2	200	...	1
Pringle	"	"	2	348	1	21	2	...

Appendix No. 14.—Continued.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Ryerson.....	Parry Sound..	Dr. J. S. Freeborn, Magnet- awan.						3
Spence	"	" "	1	201	2	47		1
Strong	"	" " "						
Armour.....	Parry Sound..	W. Jenkin, Emsdale.						
Bethune	"	" "	1	76			1	1
Joly	"	" "	1	100				3
McMurrich...	"	" "	1	36			1	
Perry	"	" "						1
Proudfoot....	"	" "						
Hardy	Parry Sound..	H. J. Ellis, Powassan..						1
Himsworth ..	"	" "	4	820	2	71	3	10
Laurier	"	" "	1	200				1
Nipissing....	"	" "	3	400	1	100		4
Patterson....	"	" "	1	100				
Bonfield....	Nipissing	W. J. Parsons, North Bay...	6	553			3	3
Boulter	"	" "	2	204	2	14		3
Chisholm	"	" "	5	667			3	8
Ferris	"	" "	10	1,092	1	100	8	15
Anson	Haliburton ...	R. H. Baker, Minden.....	1	103	1	3		2
Glamorgan ..	"	" "	5	798	1	2	5	1
Hindon	"	" "						
Lutterworth..	"	" "	2	185	1	29	2	2
Minden	"	" "	1	100				1
Snowdon	"	" "	2	300			2	
Stanhope....	"	" "	2	310			2	1
Anstruther...	Peterborough.	William Hales, Apsley						1
Burleigh, N.D.	"	" "						
" S.D.	"	" "			1	215	1	1
Chandos	"	" "						
Methuen	"	" "	1	150				
Cardiff.....	Haliburton ...	A. N. Wilson, Kinmount.....	7	874			6	6
Cavendish....	Peterborough.	" "	4	703	5	58	2	
Galway	"	" "	4	400	1	2	5	6
Monmouth ...	Haliburton ...	" "	4	435			8	2
Bangor	Hastings	W. J. Douglas, Greenview...						
Carlow	"	" "						1
Cashel	"	" "	1	100				
Dungannon ..	"	" "			1	2		2
Faraday	"	" "	4	447			2	3
Herschel	"	" "	13	1,660	2	13	3	1
Limerick.....	"	" "	3	212			1	
Mayo	"	" "	5	590			2	
Monteagle ...	"	" "	4	398			1	4
McClure	"	" "	1	101	2	122		1
Wicklow	"	" "			1	1		
Wollaston....	"	" "						1
Algona, S....	Renfrew.....	Adam Prince, Wilno.....	2	111				
Brougham ...	"	" "	3	403	1	15	5	1
Brudenell ...	"	" "	2	318			2	1
Burns	"	" "						1

Appendix No. 14.—Continued.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Grattan.....	Renfrew	Adam Prince, Wilno.....	1	104	1	100	.....	5
Griffith .....	"	"	.....	.....	.....	.....	.....	.....
Hagarty .....	"	"	.....	.....	.....	.....	.....	.....
Jones	"	"	3	475	.....	.....	.....	.....
Lyell	Nipissing	"	3	410	.....	.....	.....	1
Lyndoch	Renfrew	"	2	236	1	52 $\frac{1}{2}$	2	5
Matawatchan.	"	"	1	100	.....	.....	.....	.....
Radcliffe	"	"	2	318	.....	.....	2	1
Raglan	"	"	3	254	.....	.....	.....	12
Richards	"	"	2	398	1	19	1	5
Sebastopol ..	"	"	.....	.....	.....	.....	.....	3
Sherwood	"	"	4	249	2	84	.....	2
Algona, N....	Renfrew	Finlay Watt, Pembroke.....	1	101	.....	.....	.....	1
Alice .....	"	"	.....	.....	.....	.....	.....	2
Buchanan	"	"	1	100	.....	.....	.....	1
Fraser .....	"	"	.....	.....	.....	.....	.....	.....
Head .....	"	"	.....	.....	.....	.....	.....	.....
Maria .....	"	"	.....	.....	.....	.....	.....	.....
McKay .....	"	"	.....	.....	.....	.....	.....	.....
Petawawa ...	"	"	.....	.....	.....	.....	.....	.....
Rolph	"	"	1	100	.....	.....	1	1
Wilberforce ..	"	"	.....	.....	.....	.....	.....	.....
Wylie (pt)....	"	"	.....	.....	.....	.....	.....	2
Calvin	Nipissing	Robert Small, Mattawan ...	3	294	.....	.....	3	1
Cameron (pt).	"	"	4	656	.....	.....	.....	1
Lauder	"	"	1	100	1	14	.....	.....
Mattawan....	"	"	.....	.....	1	80	.....	.....
Papineau	"	"	7	700	.....	.....	1	4
Korah	Algoma	Edw'd Noble, Sault Ste. Marie	.....	.....	.....	.....	.....	.....
Parke.....	"	"	.....	.....	.....	.....	.....	.....
Prince.....	"	"	1	80	.....	.....	1	3
Aberdeen	Algoma	Thos. Dodds, Thessalon.....	3	416	.....	.....	2	.....
" add.	"	"	.....	.....	.....	.....	.....	.....
Galbraith....	"	"	.....	.....	.....	.....	.....	.....
Lefroy .....	"	"	.....	.....	.....	.....	.....	.....
Plummer .....	"	"	.....	.....	.....	.....	.....	.....
" add.	"	"	.....	.....	.....	.....	.....	.....
St. Joseph Is'd	Algoma	W. E. Whybourne, Marksville	4	594	.....	.....	5	5
" Ch'nl "	.....	.....	.....	.....	.....	.....	.....	1
Baldwin.....	Algoma	Edward Arthurs, Espanola .	3	480 $\frac{1}{2}$	2	2	4	3
Merriitt.....	"	"	.....	.....	.....	.....	.....	1
Blake.....	Thunder Bay.	W. A. Burrows, Port Arthur	3	360	.....	.....	2	5
Conmee	"	"	6	795	2	13 $\frac{1}{2}$	3	9
Crooks	"	"	1	160	.....	.....	1	4
Dawson Road.	"	"	8	848	3	86	8	2
Dorion	"	"	2	261 $\frac{3}{4}$	1	138	2	3
Gillies	"	"	1	157 $\frac{1}{2}$	1	161 $\frac{1}{2}$	1	3
Gorham.....	"	"	13	1,784	2	78 $\frac{1}{2}$	10	13
Lybster	"	"	2	322 $\frac{1}{2}$	.....	.....	.....	1
Marks.....	"	"	2	316	.....	.....	3	2
McGregor	"	"	4	639	.....	.....	5	4
McIntyre ....	"	"	.....	.....	.....	.....	.....	3
O'Connor.....	"	"	1	162	.....	.....	1	8

Appendix No. 14.—Continued.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Oliver.....	Thunder Bay.	W. A. Burrows, Port Arthur	4	636 $\frac{1}{2}$	2	9 $\frac{1}{2}$	3	3
Paipoonge, N R	"	" "	..	..	..	..	..	2
" " SR	"	" "	..	..	..	..	..	1
Pardee.....	"	" "	4	640	..	..	1	..
Pearson.....	"	" "	9	1,496	1	80 $\frac{1}{4}$	8	4
Scoble.....	"	" "	2	319	..	..	2	1
Stirling.....	"	" "	9	1,435	2	114 $\frac{1}{2}$	11	..
Strange.....	"	" "	1	159	1	2	1	4
Ware.....	"	" "	8	1,280 $\frac{1}{2}$	2	100	9	17
Atwood.....	Rainy River.	William Cameron, Stratton..	9	1,301	2	84	6	2
Blue.....	"	" "	..	..	..	..	1	1
Curran.....	"	" "	6	806	1	2	5	1
Dewart.....	"	" "	..	..	..	..	..	2
Dilke.....	"	" "	2	242	2	3	2	3
Morley.....	"	" "	10	1,444	3	164	12	7
Morson.....	"	" "	3	360 $\frac{1}{4}$	1	30	..	..
McCrosson...	"	" "	1	164	..	..	1	..
Nelles.....	"	" "	4	548	3	6	3	4
Pattullo....	"	" "	3	462 $\frac{1}{2}$	..	..	2	2
Pratt.....	"	" "	..	..	..	..	..	..
Rosebery....	"	" "	6	208 $\frac{1}{4}$	..	..	6	5
Shenston....	"	" "	12	1,756 $\frac{1}{2}$	..	..	6	..
Sifton.....	"	" "	14	1,966	..	..	9	1
Spohn.....	"	" "	12	1,569	3	10	12	5
Sutherland...	"	" "	10	1,457 $\frac{1}{4}$	1	2 $\frac{1}{2}$	7	2
Tait.....	"	" "	..	..	..	..	..	3
Tovell.....	"	" "	..	..	..	..	..	..
Worthington..	"	" "	..	..	..	..	..	..
Aylsworth...	Rainy River.	Alex. McFayden, Emo.....	..	..	..	..	..	..
Barwick.....	"	" "	1	200 $\frac{1}{2}$	4	37 $\frac{1}{2}$	1	6
Burriss.....	"	" "	2	345	..	..	1	6
Carpenter....	"	" "	1	122	2	43	1	4
Crozier.....	"	" "	9	1,461	3	24 $\frac{1}{2}$	8	7
Dance.....	"	" "	..	..	1	2	..	4
Devlin.....	"	" "	..	..	3	14 $\frac{1}{2}$	..	6
Dobie.....	"	" "	5	802	..	..	5	1
Fleming.....	"	" "	..	..	2	8	..	2
Kingsford....	"	" "	3	491 $\frac{1}{2}$	1	18	3	6
Lash.....	"	" "	4	685	..	..	4	6
Mather.....	"	" "	3	485 $\frac{1}{2}$	1	2	3	2
Miscampbell..	"	" "	11	1,724 $\frac{1}{4}$	..	..	7	2
Potts.....	"	" "	..	..	..	..	..	..
Richardson...	"	" "	..	..	..	..	..	..
Roddick.....	"	" "	..	..	..	..	..	..
Woodyatt....	"	" "	..	..	..	..	..	..
Aubrey.....	Kenora.....	J. E. Gibson, Dryden.....	5	478 $\frac{1}{2}$	..	..	5	1
Britton.....	"	" "	2	322	1	2	2	..
Eton.....	"	" "	2	319 $\frac{1}{2}$	..	..	2	2
Langton.....	"	" "	5	662 $\frac{1}{2}$	..	..	2	..
Melgund.....	"	" "	..	..	1	..	..	1
Mutrie.....	"	" "	2	328	1	135	2	1
Redvers.....	"	" "	26	3,662 $\frac{3}{4}$	3	151	2	..
Rowell.....	"	" "	1	119	..	..	..	1
Rugby.....	"	" "	1	160	2	77	2	1
Sanford.....	"	" "	2	158	3	279 $\frac{1}{2}$	4	4
Southworth..	"	" "	1	151 $\frac{1}{2}$	1	2	2	..
Temple.....	"	" "	2	320	..	..	1	2

Appendix No. 14.—Concluded.

Township.	District or County.	Agent.	No. of persons located.	No of acres located.	No. of purchasers.	No. of acres sold.	No. of lots resumed.	No. of patents issued.
Van Horne ...	Kenora	J. E. Gibson, Dryden...	2	160	2	677	1	5
Wabigoon	"	"	5	760 $\frac{1}{2}$	2	145 $\frac{1}{2}$	8	4
Wainwright ..	"	"	5	822	1	79 $\frac{1}{2}$	1	3
Zealand	"	"	14	2,224	2	65 $\frac{1}{2}$	15	4
Melick	Kenora	W. L. Spry, Kenora	6	793 $\frac{1}{2}$	1	25	14	2
Pellatt	"	"	2	250	...	...	6	3
Balfour	Sudbury	J. K. MacLennan, Sudbury ..	2	265	...	...	1	3
Blezard .....	"	"	...	...	...	...	...	2
Broder	"	"	3	443 $\frac{1}{2}$	1	19	...	8
Capreol	"	"	1	81 $\frac{1}{2}$	...	...	2	5
Chapleau	"	"	2	276	1	78	...	2
Dill	"	"	9	1,460 $\frac{1}{2}$	...	...	3	2
Garson	"	"	7	966 $\frac{1}{2}$	...	...	4	3
Hanmer	"	"	6	1,026 $\frac{1}{2}$	1	2	6	2
Lumsden	"	"	3	479	1	321	...	1
Morgan	"	"	3	471	...	...	3	1
Neelon	"	"	2	327 $\frac{1}{2}$	2	99	...	8
Rayside	"	"	1	101	...	...	...	5
Appelby	Sudbury	John Brown, Markstay	5	803	2	10 $\frac{1}{2}$	1	4
Casimir	"	"	4	587 $\frac{1}{2}$	...	...	1	1
Dunnet	"	"	4	620 $\frac{1}{2}$	2	6	...	4
Hagar	"	"	7	1,118 $\frac{1}{2}$	...	...	3	3
Jennings	"	"	3	479	...	...	...	...
Kirkpatrick ..	Nipissing	"	1	160	1	5 $\frac{1}{2}$	...	2
Ratter	Sudbury	"	6	958	...	...	3	2
Caldwell	Nipissing	J. A. Philion, Sturgeon Falls.	2	240	...	...	2	3
Cosby	Sudbury	"	6	875 $\frac{1}{2}$	1	2 $\frac{1}{2}$	2	5
Grant	Nipissing ..	"	3	401	...	...	1	1
Macpherson ..	"	"	4	570	...	...	...	6
Maitland	Sudbury	"	4	367 $\frac{1}{2}$	...	...	...	3
Springer	Nipissing	"	1	110	...	...	...	4
Abinger	Lennox and Addington	Charles Both, Deunbigh	1	119	...	...	...	...
Canonto, S....	Frontenac....	"	...	...	...	...	...	...
" N....	"	"	...	...	...	...	...	...
Clarendon....	"	"	...	...	...	...	...	...
Denbigh....	Lennox and Addington	"	5	598	...	...	2	1
Miller (pt.)...	Frontenac....	"	1	100	...	...	...	...
Palmerston ..	"	"	1	100	...	...	...	...
McClintock ...	Haliburton...	Unattached .....	...	...	1	36	...	1
Airy	Nipissing	"	4	613 $\frac{1}{2}$	1	1	1	2
Finlayson .....	"	"	...	...	1	25	...	1
Murchison .....	"	"	...	...	...	...	...	...
Sabine	"	"	6	655	...	...	1	1
			620	85,139	155	5,191 $\frac{1}{2}$	417	489
					No. of lots assigned	No. of acres assigned		
					232	30,694 $\frac{1}{2}$		

Appendix No. 15.

Statement of Crown Surveys completed and closed during the twelve months ending October 31st, 1916.

No.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amount paid.	No. of Acres.
1	Sept. 15, 1915.	E. R. Bingham ..	Subdivision of Township of Owens, District of Temiskaming	\$ c	
2	Oct. 15, 1915.	R. S. Code	Survey of a tie line in the vicinity of Kowkash, District of Thunder Bay	3,876 20	51,934
3	July 9, 1915.	T. G. Code	Subdivision of Township of Cody, District of Temiskaming	636 86	
4	Oct. 23, 1915.	J. W. Fitzgerald.	Subdivision of parts of Townships of Hall, Joffre, Carew and Cavell, in the District of Sudbury	713 20	11,799
5	Aug. 10, 1915.	Phillips & Benner	Subdivision of the Township of Forbes, District of Thunder Bay.	2,017 75	15,344
6	June 24, 1915.	A. L. Russell	Survey of additional lands to the Townships of Ware and Gorham, in the District of Thunder Bay..	3,100 10	33,357
7	July 27, 1915.	E. Seager	Subdivision of Township of Colenso, in the District of Kenora.	1,344 79	6,451
8	Mch. 21, 1916.	M. E. Crouch	Subdivision of the Township of Nepigon additional, District of Thunder Bay	1,763 30	23,035
9	Jan. 6, 1916.	Speight & Van Nostrand	Survey of Lady Evelyn Lake, District of Temiskaming	3,274 20	20,094
10	May 31, 1916.	McAuslan & Anderson	Subdivision of the Town Plots of Grant and Armstrong, District of Thunder Bay.	3,301 63	.....
11	Jan. 21, 1916.	McAuslan & Anderson	Survey of Peter Long Lake, in the District of Temiskaming and Sudbury	1,051 68	.....
12	July 4, 1916.	M. E. Crouch ...	Subdivision of the Township of Hele, District of Thunder Bay ..	3,228 98	.....
13	Mch. 5, 1913.	E. Seager	Survey of Timber Berths K 23 and K 23a, District of Kenora	4,499 70	30,452
14	Apr. 20, 1916.	A. S. Code	Survey of part of Peninsula No. 2, Lake Shore Road West con., Township of Bosanquet	157 94	.....
			A. J. Milden—Services on survey of Interprovincial Boundary at Lake St. Francis	90 00	.....
				28 00	.....
				29,084 33	192,466

L. V. RORKE,
Acting Director of Surveys.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 16.

Statement of Crown Surveys in progress during the twelve months ending October 31st, 1916.

No.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amount Paid.
				\$ c.
1	Apr. 15, 1915.	J. S. Dobie	Survey of islands north and west of Manitoulin Island, Districts of Algoma and Manitoulin	5,000 00
2	Apr. 20, 1915.	Lang & Ross	Survey of islands on the North Shore of Lake Huron and Georgian Bay, Districts of Manitoulin, Sudbury and Parry Sound.	9,500 00
3	Apr. 16, 1915.	T. J. Patten	Survey of islands in Lake Huron, east and north-east of Manitoulin Island, District of Manitoulin	5,800 00
4	May 26, 1916.	Phillips & Benner	Survey of Nepigon Forest Reserve in the District of Thunder Bay	4,500 00
5	June 13, 1916.	David Beatty ...	Survey of the Township of Foleyet, in the District of Sudbury	3,000 00
6	June 30, 1916.	R. S. Code	Survey of Township of Muskego, in the District of Sudbury	3,800 00
7	Sept. 5, 1916	J. W. Fitzgerald.	Survey of Township Outlines, District of Algoma	3,000 00
8	Sept. 21, 1916	McAuslan & Anderson	Survey of Town Plot of Bear Island in the District of Nipissing	200 00
9	July 31, 1916.	R. S. Code	Survey of part of the Township of Keith, District of Sudbury	
10	Oct. 18, 1916.	McAuslan & Anderson	Survey of line between Townships of Gooderham and Kenny, District of Nipissing	
11	Oct. 23, 1916.	Sutcliffe & Neelands	Survey of lines in Townships of Ogden, Bristol and Thornloe, District of Temiskaming	
				<hr/> 34,800 00

L. V. RORKE,
Acting Director of Surveys.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 17.

Statement of Municipal Surveys for which instructions issued during the 12 months ending October 31st, 1916.

No.	Name of Surveyor.	No.	Date of Instructions.	Description of Survey.
1	Speight & Van Nosstrand.....	705	Dec. 9th, 1915..	To survey Lots "J," "K" and "L," as shown on plan of subdivision of part of Lot 19, Concession 2 from the bay in the Township of York, and to plant stone or other durable monuments at the northerly angles of the said lots.
2	McKay, McKay & Webster...	706	Jan. 13th, 1916.	To survey the boundaries of Allan Street in the Town of Oakville and to plant durable monuments defining the limits of the said street in the said Town of Oakville.
3	Herbert J. Beatty.....	707	Aug. 28th, 1916.	To survey and plant stone or other durable monuments to mark the northeasterly boundary of Lots 9, 10 and 11, in the 2nd Concession of the Township of Horton (now within the limits of the Town of Renfrew), in the County of Renfrew, and also to mark the road allowance between the east halves of said Lots 10 and 11 in the said concession.

L. V. RORKE,
Acting Director of Surveys.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 18.

Statement of Municipal Surveys confirmed during the 12 months ending
October 31st, 1916.

No.	Name of Surveyor.	No.	Date of Instructions.	Description of Survey.	Date when confirmed under R.S.O. 1914, Chap. 166, Secs. 10-15 inclusive.
1	Wilbert S. Gibson.	688	Mar. 19, 1913...	To survey the allowance for road between the 1st and 2nd ranges, Credit Indian Reserve, south of Dundas Street, Tp. of Toronto, from the northwest angle of Lot No. 8, 1st range, across Lots Nos. 9, 10, 11, 12, 13 and 14 in the 1st range, and Lots Nos. 6, 9 and 10 in the 2nd range, Credit Indian Reserve, and thence along the road allowance between the 2nd range, Credit Indian Reserve, and the 2nd Concession of Toronto Township south of Dundas Street, being across part of Lot 22, Lot 23, Lot 24 and Lot 25 in the 2nd Concession south of Dundas Street, to the westerly limit of said Lot 25, being the easterly limit of the allowance for road between Lots Nos. 25 and 26, known as the "Lorne Park Road," and as regards the 2nd range on the northerly side of said road allowance, being across parts of Lot No. 10, Lots 11 and 12, and part of Lot 13, in the 2nd range, Credit Indian Reserve, and to define said allowance for road by permanent stone or iron monuments planted on each side thereof.	Nov. 16th, 1915.
2	E. R. Bingham....	695	Nov. 26th, 1914.	To survey a portion of the City of Port Arthur in the District of Thunder Bay, between John Street and McVicar and River Streets and between Algoma and High Streets, being the balance of what was known as the old town plot of Prince Arthur's Landing, and to have the corners of all the streets marked by iron bars, duly planted thereat.	Apr. 13th, 1916.
3	Jas. J. MacKay...	699	June 21st, 1915	To survey the limits of Mountain Park Avenue in the City of Hamilton, from the west side of Wentworth Street to Lakeview Avenue, and of Wentworth Street from the allowance for road between the 3rd and 4th Concessions of the Township of Barton and the brow of the mountain	Dec. 23rd, 1915.

Appendix No. 18.—Concluded.

Statement of Municipal Surveys confirmed during the 12 months ending October 31st, 1915.

No.	Name of Surveyor.	No.	Date of Instructions.	Description of Surveys.	
	Jas. J. MacKay (Continued.)	.....	.....	now in the City of Hamilton, and to plant durable monuments showing the northerly and southerly boundaries of Mountain Park Avenue, between Wentworth Street and Lakeview Avenue, and the easterly and westerly boundaries of Wentworth Street between the allowance for road between the 3rd and 4th Concessions of the Township of Barton and the brow of the mountain.	
4	S. B. Code.....	701	July 2nd, 1915..	To survey the 6th Concession line from Lot No. 25 at the side road to Lot No. 18 in the Township of Goulburn, and to have durable monuments planted at the corners of the above lots.	Nov. 26th, 1915.
5	J. L. Morris.....	702	Sept. 2nd, 1915.	To survey the Concession Line between Concessions 8 and 9, opposite Lots Nos. 1, 2 and 3. in the Township of Westmeath, in the County of Renfrew, or as much farther as may be necessary on either side, and to mark the same by permanent stone or other durable material.	Dec. 20th, 1915.
6	F. M. Eagleson. . .	703	Oct. 15th, 1915.	To survey part of the Concession Road Allowance between the 6th and 7th Concessions of the Township of Kenyon, from the east side of Lot No. 7 to the west side of Lot No. 12, and also of the road allowance between Lots Nos. 6 and 7 in the 6th Concession, and to plant durable monuments to define said road allowance opposite the above lots.	May 22nd, 1916.
7	Speight & Van Nos- trand.....	705	Dec. 9th, 1915..	To survey Lots "J," "K" and "L," as shown on plan of subdivision of part of Lot 19, Concession 2 from the bay in the Township of York, and to plant stone or other durable monuments at the northerly angles of the said lots, the copy of the plan sent to this Department being part of Registered Plan No. 528, Township of York, shows you the lots J. K and L, on Binscarth Road.	May 16th, 1916.

Appendix No. 19.

SURVEY OF THE TOWNSHIP OF FORBES, IN THE DISTRICT OF THUNDER BAY.

PORT ARTHUR, ONTARIO, Dec. 27, 1915.

SIR,—We beg to report that in accordance with your instructions dated August 10th, 1915, we have completed the survey of the township of Forbes, which is situate north of the Dawson Road lots, west of Dog river and south of Grand Trunk Pacific Block No. 1.

This township is about thirty miles north-west of the city of Port Arthur. Kaministiquia, on the Canadian Pacific Railway, and Dana on the Grand Trunk Pacific Railway are about a mile south of the south-east corner and from these stations a well graded road runs along the east bank of the river to a point opposite concession 1 in Forbes township, this with the Dog river on the east boundary form a good entrance to the east part of the township. On the west side of the river there is a wagon road starting below Paddy's rapids and coming back to the river above the Crooked rapids. The westerly portion of the township is reached most conveniently by the Grand Trunk Pacific Railway, Flett station on this road being in lot I, concession IV, also from this point a wagon road runs south to the Canadian Pacific Railway.

The survey was commenced at the six-mile post on the south boundary of Grand Trunk Pacific Block No. 1, which point was marked by an iron post and a pine post planted by O.L.S. Fawcett in 1907. From this point the west boundary of the township was run south astronomically to intersect the north boundary of the Dawson road lots. The north boundary of the Dawson road lots, being the south boundary of the township, was established by joining in a straight line from point to point, the points established by O.L.S. Bolton between lots 37 and 38, 32 and 33, 27 and 28, 22 and 23, 17 and 18, 12 and 13, and 7 and 8, concession 11, on their north boundaries. To perform this operation it was found necessary to run a trial line from each point to the next, the true line connecting the points being then run and blazed. From the posts at lots 4 and 5 on said north boundary of the Dawson road lots a line was run on a course north eighty-five degrees and twenty-three minutes east to intersect the Dog river, and this line was produced westerly to intersect the production easterly of the line as established across Dawson road lots 8 to 12.

From the points on the north boundary of the township where O.L.S. Fawcett planted his 5, 4, 3, 2, 1 and initial mile posts, lines were run south astronomically to intersect the south boundary, these lines being between lots 2 and 3, 4 and 5, 6 and 7, 8 and 9, 10 and 11, and 12 and 13, respectively. From O.L.S. Fawcett's initial mile post a line was run east astronomically to intersect the Dog river, completing the north boundary, and from a point one mile east of said initial point a line was run south astronomically to intersect the Dog river, this being the line between lots 14 and 15.

At points on the west boundary one and two miles south of the starting point lines were run east astronomically to intersect the Dog river, establishing concessions VII and VIII.

From the south-east corner of lot 8, concession VII, as established, one, two, and three miles were measured south and lines run west astronomically from each of these points to intersect the west boundary and east astronomically to intersect

Dog river, establishing concessions VI, V and IV. From the south-east corner of lot 4, concession IV as established, one mile was measured south and a line run east astronomically from this point to intersect the Dog river, establishing concession III. From the south-east corner of lot 10, concession III, one mile was measured south and a line run east astronomically from this point to intersect the Dog river, establishing concessions I and II; from the point where this line intersects the line between lots 12 and 13, one mile was measured east and a line run south from this point to intersect the south boundary, and north astronomically across concession II and produced to the Dog river.

Throughout the township all the odd numbered lots were made forty chains in width, the posts on the south boundary being planted at such distances as were required to give these lots a perpendicular width of forty chains. Iron posts were planted as shown on the projected plan.

The magnetic variation remained fairly constant at two degrees and fifteen minutes east, and no greater variation than four degrees was observed at any time.

TIMBER.

Most of the timber of economic value has been destroyed by forest fires which swept the country at various dates. The south-west part of the township and parts of the south-east portion have been burned clean so that there are now but a few scattered trees and a heavy growth of underbrush with an occasional patch of the original timber. Another fire of more recent date has destroyed the timber in the central part of the north half of the township. In the north-east corner of the township there is a considerable stand of the original growth, the merchantable pieces being spruce and banksian pine. This area extends from the north boundary to about the centre of concession VI, and extends from three-quarters of a mile to a mile from the Dog river. There are other patches of large timber further south along the river, but the largest timber in these has been cut some years ago. The remainder is timbered with poplar, banksian pine and spruce, principally, with some patches of birch and tamarac. The banksian pine in the westerly half is larger and more scattered than that on the easterly half which would average from six to eight inches.

TOPOGRAPHY.

The land in the western part of the township is of a rolling nature with occasional hills; that in the eastern half is more broken and in some places is badly cut up by ravines, which are, however, pretty well confined to the northerly part of the east part of the township. Along the Dog river through the three southerly concessions there is a considerable area of level land, but the remainder of the land adjacent to the river is for the most part rocky and broken.

SOIL.

The soil over the entire township is red clay and clay loam containing varying quantities of sand. There are rock outcrops of some extent and some of the soil is rocky, but from seventy-five to eighty per cent. of the area of the township should be well adapted to agricultural purposes.

MINERALS.

There are occasional outcrops of rock scattered over the township, but no mineral matter of economic value was seen, the formation being mostly red and gray granite or trap with quartz stringers showing in places.

WATER COURSES.

The western half of the township is drained by the Sunshine creek and its tributaries flowing into the Matawin river. In the easterly part the country is more broken and the land is drained by several small streams which flow directly in to the Dog river. No lakes were seen in the interior of the township.

ISLANDS.

In the Dog river in its course along the township there are eight islands, these have been lettered "A" to "H" in the traverse notes; none of these islands are of any value or use. "A" is in the eddy below the Crooked rapids and is small and rocky and difficult to land upon; "B" is in the rapids and inaccessible; "C" is at the head of the rapids and difficult to land upon; "D" is near the foot of the fifteen foot fall into Little Dog lake, and has rapids on two sides of it making it difficult of access; "E" and "F" are in the one hundred and fifty foot fall above Little Dog lake, are small and rocky and inaccessible; "G" is also in this fall but it is possible to land on it; "H" is in the same fall and is inaccessible from either side of the river.

FALLS AND RAPIDS.

There are six rapids or series of rapids in the Dog river from the south to the north boundary of the township. The first, known as the Twin rapids, is opposite concession III and has a drop of three feet. The second, known as Paddy's or the Flat rapids opposite lot 15, concession IV, has a fall of one foot. The third is opposite lot 16, concession IV, is known as the Lift over, and has a fall of about two and a half feet. The fourth is also opposite lot 16, concession IV, is known as the Crooked rapids and has a fall of fifteen feet. The fifth is at the head of Little Dog lake and has a fall of eleven feet. The sixth is a series of falls and rapids opposite lot 15, concession VIII and has a total fall of about one hundred and fifty-four feet. No investigations as to the flow of this river were made, the Hydro-Electric Power Commission having taken over the water powers in this river and made all the necessary surveys much more accurately than could be done by us with the limited time and instruments at our disposal.

IMPROVEMENTS.

No clearings were seen within the township and the only thing that could be classed as improvements were a few log cabins which are located as follows: South half of lot 1, concession III; north half of lot 6, concession III; two on the north half of lot 7, concession III; the foundation logs on south part of lot 14, concession IV; and a deserted and decaying cabin on lot 15, concession IV. None of these appear to be occupied and we were unable to locate anyone having any knowledge of them.

GAME.

Numerous indications of deer and moose were seen; beaver are also plentiful on most of the streams; no fish of any size were seen, probably due to the small size of the streams.

We have the honour to be, Sir,

Your obedient servants,

(Signed) PHILLIPS & BENNER,

Per E. P. A. BENNER.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 20.

SURVEY OF THE NORTHERN PORTIONS OF THE TOWNSHIPS OF WARE AND GORHAM,
DISTRICT OF THUNDER BAY.

PORT ARTHUR, December 31st, 1915.

SIR,—I have the honour to report that in accordance with your instructions I have completed the survey of the "Projected Base Line running east astronomically from the north-east angle of Gorham township together with the subdivision of remaining portions of concession VIII, township of Gorham and concession VIII, township of Ware, district of Thunder Bay," and beg to submit herewith the usual field notes of survey, also three plans.

First.—General plan on a scale of 40 chains to the inch, showing lines run.

Second.—A plan on a scale of 40 chains to the inch, showing character of land and timber in the eastern portion of concession VIII, Gorham township and east of Jacques township.

Third.—A similar plan on a scale of 40 chains to the inch of concession VIII, township of Ware and the lands west of Jacques township.

The notes in connection with the two latter plans are from personal investigations by the land ranger attached to my party who has had many years experience in such matters.

As mentioned in previous progress reports concerning the portion of Gorham township and section east of Jacques township, the land in our opinion is very largely of no value and unsuitable for agricultural purposes, and the timber being almost entirely second growth—tamarac all dead—of very little value.

For mining purposes the land may eventually be in demand; some seven or eight mining claims at the north-east corner of Gorham township may possibly bring about the discovery of copper and gold values of commercial value. There is very little development work however in evidence at present.

When surveying Onion lake and Current river, I, at the suggestion of the Engineering and Utilities Departments of the city of Port Arthur, located the

shore line where it will be when the storage reservoir at Onion lake has been as planned, raised to the maximum of 20 feet above the present temporary level by the dam designed for the new site selected, about one and one-quarter miles south of the present combined dams. The new dam will give very much increased storage and have a high factor of safety. The cost of work so far in this municipal enterprise at Onion lake has been about \$70,000.

The lands in Ware township are decidedly more inviting in character. According to the land ranger's report every lot contains more or less land adapted to agriculture as per list accompanying printed forms. The timber also is generally of useful dimensions.

In the unsurveyed portion north of Ware and south-east of Dog lake, one block of about eighteen square miles is estimated to contain nearly sixteen miles of agricultural land, the rocky ridges in some portions being very narrow and forming a very small percentage of the total area. Fair sized timber is also to be found in this locality—much of the spruce averaging from ten to fifteen inches in diameter. As shown on the plans and lists, we encountered a few instances where improvements had been made. On the western margin of this strip, at the north end of Little Dog lake a Hydro-Electric development plant is projected to utilize the magnificent fall of 350 feet between Dog and Little Dog lakes, which it is estimated will furnish an equivalent of the power produced by the Kaministiquia Power Company at the famous Kakabeka falls lower down the river. A Government reserve should be retained at this point as well as along the route of the proposed transmission line which has been located to Port Arthur.

Another water power exists at the Crooked rapids on the same river opposite concession VII, where a drop of fifteen feet occurs.

Fishing operations are being carried on at Dog lake, the catch being transported to headquarters at Port Arthur.

GAME.

Very little game, such as moose, deer, bear, partridge and rabbit were seen, the rabbit being unusually scarce during the past season. Wolves were very much in evidence and on two occasions overthrew my transit, causing considerable damage and delay.

ROADS.

Access to the Dog lake country during the summer is at present entirely by canoe. The bridges built by the former lumber companies having been swept away by spring freshets. This road can, however, be used in winter and by a comparatively small judicious expenditure could be very much improved as a summer route. The valley of Portage creek forms a natural route to the interior of a section otherwise not easily accessible. The only improvements noticed were a very fine log dwelling on the Kaministiquia river on the south boundary of concession VII, where other considerable improvements are under way. There was also a building occupied by two men near the narrows of One Island lake, probably for fishing and hunting purposes. The Finlanders who are the principal settlers in the outlying districts deserve credit for their energy and enterprise as pioneer settlers in a region which has small attraction for a less industrious class. When traversing the frontage of the Kaministiquia river across concession VIII, we carried the survey down across concession VII, where only a rough pacing traverse had here-

tofore been made. A traverse was also made connecting the triangulation points of the Trout lake survey on the boundary between Ware and Gorham township in concession VIII. On lot 1, concession VIII, Ware township, the settler Tarsti had built a house, unfinished, on what he believed to be the north half of the lot, but which our survey located on the south half.

In fractional lots it would be much fairer to the settler were the portion allotted described from a given point.

Observations were taken frequently and a check with O.L.S. Benner's work at the south-east angle of Jacques township tallied out, as regards both Azimuth and chainage, exactly with our own.

The disconnected nature of our work and the addition of land ranger (with an occasional assistant), also more than the average of wet weather have materially increased the estimated cost of a season's operations.

Should it be deemed advisable to lay out a township south-east of Dog lake a survey of the extensive lake shores could be more advantageously made on the ice during the winter.

Unforeseen circumstances have delayed the sending in of my returns at an earlier date.

I have the honour to be, Sir,

Your obedient servant,

(Signed) A. L. RUSSELL,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 21.

SURVEY OF THE TOWNSHIP OF COLENZO, DISTRICT OF KENORA.

KENORA, December 23rd, 1915.

SIR,—I have the honour to report that under instructions from your Department dated July 27th, 1915, I have surveyed the township of Colenzo into farm lots and submit herewith my plans and field notes of the survey.

TIMBER.

This township is covered with growth of small jack pine, poplar, spruce, tamarac, birch and balsam. With the exception of a few trees of red pine on the shore of Rice lake, and a small quantity of scrub ash, elm and oak on the banks of the Wabigoon river, the better class of timber is entirely lacking.

On the hills and ridges the timber is for the most part short, scrubby jack pine, spruce and birch 3 in. to 8 in. in diameter; of no commercial value, being too

small for anything but cord wood, and too far away from railway stations for that to be of any value.

The flats and ravines have a larger growth of timber, principally poplar and spruce 3 in. to 16 in. in diameter, but are in such small quantity, and so badly scattered, that it is doubtful if there would be a larger quantity than needed to supply the settlers need.

The swamps have also a few spruce 3 in. to 16 in. in diameter, but for the most part the timber in the swamps is of a poor quality. The tamarac is of use for no other purpose than for fire wood, as ninety per cent. of it is dead and the balance dying.

On the rolling land where soil is clay or clay loam, jack pine and poplar are the principal timbers, and are for the most part short and scrubby but sound and run in size from 3 in. to 12 in. in diameter. The timber larger than 8 in. or 9 in. in diameter is scattered, and the jack pine would be of very little value for ties on account of its shortness and roughness.

On the sand and boulder lands the timber is principally jack pine and spruce, and is sound and smooth timber from 3 in. to 11 in. in diameter. There is such a small quantity of this class of timber and it is so badly scattered that it would be of very little commercial value.

On the banks of the Wabigoon river there is a small amount of elm, ash and oak timber 3 in. to 12 in. in diameter, but for the most part it is short and very scrubby and of very little value. More detailed information follows:

Con. I, Lots 1 and 2.

On the hills and ridges of those lots the timber is small jack pine, spruce, poplar and birch from 3 in. to 8 in. in diameter and suitable for no other purpose than cord wood. In the valleys there is a small quantity of scattered poplar and spruce from 4 in. to 10 in. in diameter.

Con. I, Lots 3 and 4.

The timber on the south and east parts of those lots is small jack pine, spruce, poplar and birch from 3 in. to 8 in. in diameter, on the north and west the timber is slightly larger, on this part of the lot there is a small amount of scattered jack pine large enough for ties.

Con. I, Lots 5 and 6.

Approaching Colenso creek the timber is of a better class. On the north half lot 6 there is a small bunch of fairly good spruce from 4 in. to 16 in. in diameter, but the amount is small. There is also some scattered jack pine, large enough for ties. The bulk of the timber is jack pine, poplar, spruce, tamarac and balsam 3 in. to 8 in. in diameter.

Con. I, Lots 7 and 8.

The timber on those lots is for the most part small jack pine, poplar, spruce, birch, tamarac and balsam 3 in. to 8 in. in diameter, with small quantity scattered jack pine and spruce up to 12 in. in diameter. On the north half lot 7 on the shore of Rice lake, there are a few red pine trees 14 in. to 18 in. in diameter.

Con. I, Lots 9 and 10.

On the south half of those lots there is a small quantity of scattered jack pine, poplar and spruce up to 14 in. in diameter. Bulk of the timber is spruce, jack pine, poplar, birch, tamarac and balsam 3 in. to 8 in. in diameter. North half of lots is mostly marsh and lake.

Con. I, Lots 11 and 12.

On the south part lot 11 there is a small amount of jack pine, poplar and spruce 3 in. to 11 in. in diameter. On north half lot 12 there is a small amount of jack pine, spruce and poplar 3 in. to 8 in. with few scattered jack pine up to 11 in. diameter. Those lots are mostly marsh and muskeg.

Con. II, Lots 1 and 2.

The timber on those lots is small, smooth jack pine, spruce, and poplar 3 in. to 9 in. in diameter. About thirty per cent. of those lots is an old brûlé.

Con. II, Lots 3 and 4.

On those lots in the vicinity of Colenso creek there are some poplar and spruce up to 16 in. in diameter, and scattered over those lots is a small quantity of jack pine suitable for ties, and poplar and spruce large enough for pulp wood. The bulk of the timber is jack pine, spruce, poplar, tamarac and balsam 3 in. to 8 in. in diameter.

Con. II, Lots 5 and 6.

Those lots are covered with a growth of small jack pine, poplar, spruce, tamarac, birch and balsam 3 in. to 8 in. in diameter, with few scattered jack pine, poplar and spruce in the flats and ravines up to 11 in. in diameter.

Con. II, Lots 7 and 8.

The west part of those lots is almost entirely swamp with a very poor quality of spruce timber. On the south part of those lots, that is the part bordering on Rice lake, there is a fairly good bunch of spruce, jack pine and poplar 4 in. to 14 in. in diameter. On the remainder of those lots the timber is scrubby jack pine, poplar, spruce, birch and balsam 3 in. to 8 in. in diameter, with few scattered trees up to 12 in. in diameter.

Con. II, Lots 9 and 10.

Those lots have large amount of swamp and marsh with poor quality of spruce timber. On the clay land there is jack pine, spruce, poplar and balsam mostly of a small size, with few scattered trees of spruce and poplar up to 11 in. in diameter.

Con. II, Lots 11 and 12.

The timber on those lots is small scrub jack pine, poplar, spruce, balsam and tamarac 3 in. to 8 in. in diameter. There is a good deal of those lots marsh and muskeg, with no timber of any kind.

Con. III, Lots 1 and 2.

There is a great deal of swamp on the west part of those lots. Tamarac is mostly dry and the spruce is faulty and small. There are few scattered spruce around edges of swamps up to 14 in. in diameter. On the east part of lots the timber is jack pine, spruce, poplar, birch and balsam 3 in. to 8 in. in diameter.

Con. III, Lots 3 and 4.

On that part of those lots lying south and east of Mud lake, except along banks of Colenso creek, the timber is small jack pine, poplar, spruce, tamarac and balsam 3 in. to 8 in. in diameter. Along banks of Colenso creek and north and east of Mud lake, the timber is larger but scrubby, jack pine, poplar and spruce 3 in. to 12 in. in diameter.

Con. III, Lots 5 and 6.

On those lots there is a poplar flat of considerable extent with timber small, 3 in. to 7 in. in diameter. Balance of lots similar to that south of Mud lake.

Con. III, Lots 7 and 8.

With the exception of a very small amount of spruce timber in the flats and swamps up to 12 in. in diameter, those lots have very little else than scrub jack pine, spruce, poplar, tamarac and birch 3 in. to 7 in. in diameter.

Con. III, Lots 9 and 10.

On south part of those lots there is a narrow strip of timber with some jack pine and spruce up to 11 in. diameter. On north part there is a small swamp with few spruce up to 16 in. diameter. Balance of lots is covered with scrub spruce, jack pine, poplar, birch and balsam 3 in. to 7 in. diameter.

Con. III, Lots 11 and 12.

Timber on those lots is small jack pine, poplar, spruce, tamarac, birch and balsam 3 in. to 8 in., not suitable for other purpose than cord wood.

Con. IV, Lots 1 and 2.

There is a good deal of swamp on those lots with poor quality of timber which is scrub spruce, poplar, jack pine, tamarac, birch and balsam 3 in. to 8 in. with very few scattered spruce up to 16 in. diameter.

Con. IV, Lots 3 and 4.

The north part of those lots is covered with scrub jack pine, spruce, tamarac, poplar, birch and balsam 3 in. to 8 in. diameter. On the south part the timber is a little larger, and has some jack pine and poplar scattered through it up to 11 in. in diameter.

Con. IV, Lots 5 and 6.

Those lots are covered with a small class of jack pine, poplar, spruce, birch, tamarac and balsam 3 in. to 8 in. diameter, with timber running a little larger toward the west side and in the flats where there are a few scattered trees up to 12 in. diameter.

Con. IV, Lots 7 and 8.

With the exception of small swamp which has a few spruce up to 16 in. diameter, those lots are similar to lots 5 and 6. Timber of the same quality and size.

Con. IV, Lots 9 and 10.

Timber on those lots is similar to that on the previous ones.

Con. IV, Lots 11 and 12.

The north part of those lots has a good deal of swamp with dead tamarac and some spruce up to 14 in. in diameter, balance of lots is covered with fairly good class of jack pine, poplar, spruce and birch 3 in. to 10 in. diameter.

Con. V, Lots 1 and 2.

The south-east part of those lots is covered with scrub spruce, poplar, birch, tamarac and balsam 3 in. to 8 in., of no commercial value. Balance of lots is marshes or lakes.

Con. V, Lots 3 and 4.

The north-east part of those lots has a spruce swamp with few spruce up to 12 in. diameter. Balance of lots is covered with jack pine, spruce, poplar and birch 3 in. to 8 in. in diameter.

Con. V, Lots 5 and 6.

The south-west part of those lots has some scattered spruce and jack pine timber up to 12 in. diameter, and south of Chanley lake there is a small bunch of jack pine timber suitable for ties 6 in. to 14 in. diameter. Balance of lot jack pine, spruce, poplar, birch, tamarac and balsam 3 in. to 8 in.

Con. V, Lots 7 and 8.

In the flats on those lots there are some poplar and spruce up to 16 in. diameter. Balance of lots are covered with jack pine, poplar, spruce, tamarac and balsam 3 in. to 9 in.

Con. V, Lots 9 and 10.

Along the flats and ravines in those lots there is some scattered timber up to 12 in. diameter suitable for ties or pulpwood. Balance of lots jack pine, poplar, spruce, and birch 3 in. to 8 in. diameter.

Con. V, Lots 11 and 12.

The timber on those lots is jack pine, poplar and spruce 3 in. to 8 in. in the flats and on the clay land, on the rock hills it is scrub timber 3 in. to 6 in. of no value.

Con. VI, Lots 1 and 2.

On the south-east part of those lots there is on the ridges a good quality of spruce and jack pine timber 3 in. to 12 in. in diameter. Balance of lots is either scrub timber 3 in. to 6 in. in diameter or brulé.

Con. VI, Lots 3 and 4.

A small portion only of those lots is covered by green timber, balance is brulé. Where timber is green it is small jack pine, spruce, poplar, birch and balsam 3 in. to 7 in. in diameter.

Con. VI, Lots 5 and 6.

Similar to above.

Con. VI, Lots 7 and 8.

Similar to above, excepting that green timber is little larger, 3 in. to 10 in. diameter.

Con. VI, Lots 9 and 10.

South part of lots jack pine, poplar, spruce, birch and balsam 3 in. to 10 in. Some spruce and poplar in swamp on north side to 14 in. Balance scrub timber 3 in. to 6 in. or brulé.

Con. VI, Lots 11 and 12.

North part of lots is brulé, balance jack pine, poplar, spruce, birch and balsam 3 in. to 11 in. diameter.

SOIL.

In the township of Colenso on the rolling land the soil is for the most part a white clay loam. This soil is very similar to that of the township of Wabigoon to the west and Mutrie to the south, and has been shown to be, with proper cultivation, a good class of agricultural land.

The soil in the valleys and on the level ground is mostly a white soft clay covered with muck 4 in. to 6 in. in depth.

Along Colenso creek there is a good deal of level and low rolling land of a good quality of clay and clay loam. In places along this creek there is a considerable amount of good hay land 6 ft. to 8 ft. above the creek.

Along the Wabigoon river there is a considerable amount of marsh on some of which there is a considerable amount of hay growing. But for the most part those marshes are useless with the present water level of the Wabigoon river.

There is a large amount of swamp land on lots 1 and 2, concessions IV and V; lots 8 and 9, concessions II and III; lots 2 and 3, concession III; lots 10 and 11, concessions I and II; those swamps are very wet.

In concession VI there is a very small percentage of good land, lots 2 and 3 and 8 and 9 are the only ones with large amounts of good clay land, the others have a considerable quantity of rock and sand.

In concession I, lots 1, 2 and 3 have very little land suitable for agricultural purposes, being principally lake and rock.

With the exception of those places mentioned above every lot has a considerable amount of good agricultural land, principally clay loam.

There is on some of the lots a small amount of sand and gravel, especially on lots 6 and 7, concession V, and lots 9, 10, 11, concession IV, with the exception of those places we saw very little sand.

ROCK.

On concession I, lots 8, 9, 10, 11 and 12, in the township of Colenso, the rock formation is an altered trap rock. On all other parts of the township the rock is either granite or granitoid gneiss, showing no sign of mineral.

On concession VI the rock hills are rolling and continuous, in some parts attaining a height of 100 feet.

Lots 1, 2 and 3 in the 1st concession are, with the exception of Lake George, almost entirely rock.

In other parts of the township rock hills and ridges are numerous but are for the most part rolling and do not appear to be either long or wide.

The slopes of a number of those hills are rock, but on top there is a good quality of soil.

The main hills run in a north-east and south-westerly direction. The township of Colenso is fairly well watered. There are thirteen lakes, one river and numerous creeks within its borders.

(1) Lake George, concession I, lot 1, is a good clear water lake, apparently a spring lake of good depth. On the north side there is a small sand and gravel beach, balance of lake has rocky shore.

(2) Johnson lake, concessions V and VI, lots 1 and 2, is a shallow highly coloured lake and is almost entirely surrounded by hay marshes; not suitable for summer resort.

(3) Rice lake, concessions I and II, lots 7, 8 and 9, is a lake on a level with the Wabigoon river, from which it is separated by a narrows two chains in width and some five chains long. The water is slightly coloured on account of the large beds of wild rice. There being a very small portion of the lake only in which rice does not grow. It has a depth of from 1 ft. to 10 ft. and is not suitable for summer resort.

(4) Mud lake, concession III, lots 4 and 5, is a highly coloured muskeg lake, entirely surrounded by marshes; is very shallow, 18 inches in depth with a very soft bottom. When Colenso creek is high the water flows from it into this lake. Not suitable for summer resort.

(5) Chanley lake, concessions V and VI, lots 5 and 6, is a shallow, clear water lake. On the north-west and east sides the shores are marshy, balance of lake has sand or rocky shores.

(6) Leo lake, concession VI, lots 9 and 10, is a slightly coloured lake at present flooded by beaver dams. South shore and forty per cent. of north shore are rocky, balance of shore is marsh and drowned land. Not suitable for summer resort.

(7) Louis lake, concessions V and VI, lot 11, is a highly coloured lake, flooded by beaver dams. West shore of lake is rocky, balance drowned land and marsh. Not suitable for summer resort.

(8) Final lake, concession II, lots 9 and 10, a small, highly coloured, shallow lake, entirely surrounded by marshes. Not suitable for summer resort.

(9) Cliff lake, concession I, lots 2 and 3, a small lake with slightly coloured water, with high hills on north and south sides. Not suitable for summer resort; water shallow.

(10) Bog lake, concession IV, lot 1, east boundary, a small highly coloured lake, surrounded by marshes, not suitable for summer resort, water shallow.

(11) Boundary lake, concession VI, lot 9, north boundary, a small muskeg lake entirely surrounded by marsh and drowned land. Water is highly coloured and shallow. Not suitable for summer resort.

(12) Favel lake, concession I, lots 11 and 12, water is highly coloured and shallow, and the part on township of Colenso, excepting a very small amount on the north-west corner is entirely surrounded by marshes. Not suitable for summer resort.

(13) Meadow lake, concessions I and II, lot 10, a small, highly coloured lake surrounded by marsh. Water flows into this lake from the Wabigoon river during high water.

RIVERS.

In its course through the township of Colenso the Wabigoon river is a slow flowing stream 3 chains to 5 chains in width, and for the greater part of the way flows through a marshy country; in such places there is a narrow clay bank along each side of the stream. The water is slightly muddy and from 10 ft. to 20 ft. in depth. All of the creeks from Colenso Township eventually find their way to this river. The water is slightly contaminated from the Dryden Pulp Mill.

COLENZO CREEK.

The source of this creek is Rosamond lake, 7 miles east of Morgan station on the G.T.P. Railway and enters the township of Colenso from the east in concession III. With the exception of a short distance in lots 8 and 9 it flows through this township until emptying into the Wabigoon river. It is from 50 to 75 links in width according to the seasons of high or low water. The water is good but slightly muddy on account of the beavers continually working in it. There are a number of beaver dams which control depth of water. There are also a few rapids which have very little drop and a very small quantity of water flowing over them, except after heavy rain storms.

LONG LAKE CREEK.

The source of this creek is Long lake on north side G.T.P. Railway east of Morgan station. It enters Colenso township from the north in lot 6, concession VI, and leaves township in lot 12, concession IV. This creek has highly coloured water

and is from 15 to 25 links in width. It has few rapids with very little water coming over them. It has numerous beaver houses and dams, which make a considerable amount of flooded land. Its depth is from 2 ft. to 4 ft.

There are a number of other small creeks throughout the township which are sufficiently large to warrant settlers a constant supply of water for household and barns. Some of those creeks are apparently from springs as the water is both clear and cold.

WATER POWERS.

There are none in the township.

NAVIGATION.

The Wabigoon river is sufficiently large and deep to be navigable for small steam boats or craft of other kind. Colenso creek is navigable for canoes for its full distance across the township. There are a few short portages but the greatest obstacle is the large amount of driftwood caused by beavers.

ISLANDS.

On the Wabigoon river in concession I, lot 10, there are two small islands. No. 1 is a low level island with marshy shores. No. 2 is merely rock with a few trees growing on it; not suitable for summer resort. On Favel lake there is one low rocky island not suitable for summer resort. On Johnson lake there is one small island, low and rocky, not suitable for summer resort. On Rice lake there is one small rocky island. It has few trees growing on it, but it is not suitable for summer resort.

ROADS.

Throughout the township of Colenso there are numerous roads branching from one of two main roads. One of those main roads commences at Vermilion bay, township of Langton, and has a floating bridge strung on cables across the Wabigoon river. The other main road commences at Waldorf siding in the township of Mutrie; there is no bridge across the Wabigoon river on this road. Both of those roads go to an old G.T.P. construction camp one mile west of Morgan station on the G. T. P. Railway.

With the exception of concession VI roads can be easily made as the land in most places is fairly level and has very few steep hills.

FISH.

In the Wabigoon river, pike, pickerel, gold eyes and suckers are plentiful. Colenso creek has some pike. Of the other lakes we had no way of ascertaining what fish are in them.

ANIMALS.

Of the larger animals moose are plentiful along the east and north parts of the township, while along the streams and swamps deer are abundant. Of the smaller animals beaver and wolves are the most numerous and are very plentiful. There are also mink, skunk, fisher and fox.

I have the honour to be, Sir,

Your obedient servant,

(Signed) EDMUND SEAGER,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 22.

SURVEY OF AN ADDITION TO THE TOWNSHIP OF NEPIGON, DISTRICT OF
THUNDER BAY.

NEPIGON, ONT., June 15th, 1916.

SIR,—I beg to submit herewith a report on the survey of an addition to the township of Nepigon in the district of Thunder Bay, surveyed by me under instructions from the Department of Lands and Forests dated Toronto, March 21st, 1916. This survey consisted of the addition of four concessions to the old township of Nepigon, numbered VI, VII, VIII and IX, with sixteen lots in each concession. This addition is bounded on the south by the township of Lyon, on the north by the township of Booth and on the west by unsurveyed lands.

Pursuant to instructions, I commenced my survey at a post planted by O.L.S., Scott to mark the northwest angle of lot 14 in the 5th concession. From that point I ran my side line between lots 14 and 15 west astronomically 4 miles, planting a post at the end of each mile. From the several mile posts on that side line I ran my concession lines south astronomically to intersect the north boundary of the township of Lyon, and north astronomically to intersect the south boundary of the township of Booth—with the exception that I ran the west boundary of Nepigon township north and south astronomically from the side line between lots 12 and 13, rather than from the line between lots 14 and 15, this having been found to be the more accurate and practicable method on the ground.

I ran the side lines in these concessions between lots 12 and 13, 10 and 11, 8 and 9, 6 and 7, 4 and 5 and 2 and 3 west astronomically from the posts planted by O.L.S. Scott on the west boundary of concession V, or from points on said boundary re-established by me. With regard to the said west boundary of concession V—this line had been run in 1873. But three of the original posts could be found, one of these being a half mile post, this having undoubtedly been planted in error for it was planted where no post should have been planted and was then incorrectly marked as well. I re-ran the entire length of this boundary. Settlers had taken up the lots in

concession V and had blazed lines and trails sometimes on two, sometimes on three sides of the trees. Without running the line with the transit it was impossible to determine with any degree of accuracy the location of the line. This line has therefore been run, blazed correctly and posted according to the Survey Act. As stated above, from points on this line re-established by me, I ran my side lines between the lots west astronomically to intersect the west boundary of the township as run by me.

In pursuance with my instructions, I planted substantial wooden posts, in almost every case of spruce, to mark the angles of the lots. All posts were accurately planted on the lines of survey. Bearing trees were taken in accordance with the instructions and mounds of stones placed about the posts where necessary.

Alongside the wooden posts, at the points noted in my field notes, I planted iron posts marked similar to the wooden posts, alongside which same were planted. In several instances it was found that it was impossible to plant said iron posts due to the granite. I then had the iron post planted at a different point from that as indicated on the projected plan sent me, careful note having been made of such cases. In all cases the posts were correctly marked with the scribe this having been impressed upon the chainmen with great care.

I made a traverse survey of the Black Sturgeon river pursuant to instructions and beg to enclose plan and notes of same. I have noted in these notes and on the plan where the rapids are located and the portages. I have made no reservations to the Crown along this river. At the time this survey was made, the river was at its highest. From inquiries made here I find that for the greater part of the year the river is very low, barely covering the rocks so it is said. There was some 15 feet of water when I made my traverse. There were no islands in the river through the section of it traversed by me. I have divided my traverse into three sections, as indicated on notes for the same. I used the method of continuous bearings for the traverse, commencing at a side line and carrying out the work as stated above, in three sections. This will be quite clear from the plan and notes. The stadia was used throughout the survey, except in cases where the lines of the survey intersected the river, when the distance was obtained with a four chain tape.

I beg to state that I found it necessary to re-run the north boundary of the township of Lyon. This line was run originally in 1878. It had been very poorly blazed evidently and also it would appear that there was little timber of any size there at the time said line was run. No posts were found on this line except at the southeast corner of this addition surveyed by me. Here I found an old post lying on the ground, rotten. I therefore re-ran this line, blazed it correctly and posted it where my survey lines between the several concessions intersected it.

I made a separate traverse of each lake met with in the survey of this addition. These traverses were made with the stadia. I beg to enclose plan of said traverses and field notes of same. In each case these traverses have been connected with some known point on one of my survey lines. Said lakes, as well as the Black Sturgeon river, have also been plotted on my final plan and upon my timber plan. I have marked on each lake the area of same and in computing the areas of the lots in the different concessions I have subtracted the area of the lake, lakes, or river in said lot.

I beg to state that my lines were well cut out and well blazed, particular care having been taken with regard to the blazing, knowing as I do, the importance placed by the Department upon this matter. Astronomical observations were taken on the west boundary of concession V before commencing the lines which I ran westward between the lots. Finding that my lines were checking well for distance and angles of intersection throughout the survey I did not take further observations through the

township. A glance at the plan and field notes will show that the lines checked well. As will be noticed from the plan lot 1 is very narrow, due to errors in the previous survey of the township of Nepigon, and the same may be said of concession VI.

TIMBER.

As shown by the field notes and by the timber plan, this township addition is very well timbered. It will be unnecessary to go greatly into detail further than to state that the entire township is thickly timbered with spruce which varies from 6 to 20 inches in diameter, an average being about 8 inches. In many of the lots, this is found in large quantities. I might say that the whole central and southeasterly parts of the township are particularly well covered with this spruce. Birch is also found in considerable quantities, this being very large. There are great quantities of it at about 20 inches. The balsam runs large but it is not in such large quantities as either the birch or the spruce. There is little poplar, some large cedar which is for the greater part rotten. Some good cedar is to be found near the creeks noted in the field notes. Scattered white pine was found in running the lines but this was not in large quantities. Almost every lot contained some, I would say that there were about 35 of these to a lot, varying from 24 to 40 inches in diameter. Further comment of the timber is rendered unnecessary by the inclusion of the timber plan in my notes and my field notes which I believe will be found to be rather complete with regard to notes on the timber and soil.

SOIL.

In making this survey I impressed upon the chainmen the necessity of noting carefully the soil, and this, I believe, has been done with all reasonable care. From a glance at my timber plan it will be seen that for the greater part this township is rocky, this rock being granite. Here I might say that no economic minerals were met with on this survey.

I have made a note of the following lots which were found to contain good soil, this being a clay loam—In concession VI, lots 2, 3, 4, 5, 6 and 7; in concession VII, lots 1, 2, 3, 4, 5 and 7; in concession VIII, lots 1, 2, 3, 4 and 5; in concession IX, lots 2, 3, 4, 5, 6. These lots for practically their entire acreage have good soil. This does not condemn many of the other lots in the several concessions, for in the valleys it was found that there was good soil. My survey lines, as is often the case, ran through the roughest and hilliest of the country in the township. In the valleys my men found good soil. This was not shallow, but had up to three and four ft. depth over the granite. But I would draw particular attention to the lots I have named above as being undoubtedly the best in this addition. But, as stated, many of the adjoining lots will be found to have from 30 to 70 per cent. of good soil. I regret that I was unable to cover personally more of the area contained in these lots. Along the Black Sturgeon river for the distance traversed by me, I found low, flat banks of good clay soil, this having considerable depth. A glance at the field notes will show some hills and many sheer drops of great height. The heights of these have not been at all exaggerated, as would appear possible. I checked with the transit by vertical readings several of these and found that my chainmen had in several instances under, rather than over, estimated the heights.

Most of the lakes encountered were from 6 to 15 feet in depth and contained some trout. The Black Sturgeon river is also a good trout stream, although at the time I made this survey, it was fairly alive with large suckers. The water in the lakes was quite clear, good drinking water.

I enclose with this report my account for said survey, I computed the river distance from my traverse of same. I also beg to submit herewith my final plan, field notes, timber plan, affidavits, etc. May I add that in this survey I met with two settlers in this addition. I enclose statement with regard to their improvements. Mr. Lawrence is upon the east half of lot 2 in concession VII and Mr. Miller upon the east half of lot 3 in concession VII. These men inform me that they are going to make application for these lots. Both of these men worked for me upon this survey. I believe they will make good settlers and I beg to suggest that their applications for these lots will receive consideration first, at the time the said lots are placed on sale, if that is the intention of the Department with regard to the lots in this addition.

I trust that this report, the plan and field notes will be found quite satisfactory.

I have the honour to be, Sir,

Your obedient servant,

(Signed) M. E. CROUCH,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 23.

SURVEY OF THE TOWNSHIP OF HELE, IN THE DISTRICT OF THUNDER BAY.

NIPIGON, ONT., August 26th, 1916.

SIR,—I beg to submit herewith a detailed report on the survey of the township of Hele in the district of Thunder Bay, surveyed by me under instructions dated July 4th, 1916.

The township of Hele may be reached by taking a road from the town of Nipigon to the east boundary of the recently surveyed addition to the township of Nipigon; thence across said addition a distance of four miles, the west boundary of this addition being the east boundary of the township of Hele. Or, this township may be reached by taking the C.P.R. west from the town of Nipigon a distance of about 12 miles to the Black Sturgeon river, thence up the river across the south-west corner of the addition to Nipigon township, the river crossing the east boundary of Hele township in the third mile from the south boundary. This latter route is the one used by me in transporting my supplies in for the survey. There are few portages and there is sufficient depth to the river to make this a most convenient method of reaching the township.

The township of Hele is eight miles long in a north and south direction, six miles wide in an east and west direction. It consists of six concessions, numbered from east to west, with sixteen lots in each concession, numbered from south to north.

It is bounded on the east by the recently-surveyed addition to the township

of Nepigon, on the north and west by unsurveyed land, on the south concessions X and XI of the township of Lyon lie south of concessions I and II of Hele, and concessions I, II, III, IV of Stirling township lie south of concessions III, IV, V, VI of Hele. The township of Booth lies to the northeast of Hele township.

Pursuant to instructions, I commenced my survey at the southwest angle of the addition to the township of Nepigon recently surveyed by me. I chained westerly along the north limit of Lyon township and Stirling township a distance of six miles, planting posts at the end of each mile. From said posts I ran my lines between the several concessions north astronomically to intersect the north limit of Hele, as subsequently surveyed by me. I commenced at the southwest angle of the addition to the township of Nepigon and chained northerly along the westerly limit of said addition a distance of eight miles (see notes) planting posts at the end of each mile, also at the half miles as per instructions. From the mile posts thus planted I ran my lines between the alternate lots west astronomically to intersect the westerly limit of Hele township, as subsequently surveyed by me. In every case the jogs between the posts planted by me and posts planted on the boundaries of Lyon, Stirling, Booth and Nepigon townships, were carefully noted.

I beg to state that particular attention was paid to the correct marking and planting of all posts, these conforming with the requirements of my instructions. Iron posts were planted alongside the wooden posts at the points indicated on the projected plan accompanying my instructions. Bearing trees were noted in all but a very few instances.

The lines are blazed according to instructions. Exceptional care was taken with this, one man devoting his entire time to this work. This was done in view of the importance which I know is placed by your Inspector upon this part of the work. My chainmen were experienced men. Their work was carefully and, to the best of my knowledge, accurately done. Throughout the survey of this township, your instructions have been closely adhered to.

The Black Sturgeon river crosses this township, flowing in a general southeasterly direction. This river, as well as all lakes in the township, I carefully traversed and have plotted same upon a scale of ten chains to the inch. These traverses with the notes on the same, accompany this report.

The soil and the timber in this township were most carefully noted. This work was not left to the chainmen, but was done by my transit man and myself.

SOIL.

As will be noted from my timber plan, a very considerable amount of the soil in this township is clay. This is a white clay, not the red clay found in the vicinity of the town of Nipigon. It is for the most part similar to the soil found in York County. Practically all of concessions IV, V, VI lie in this clay belt, also the entire valley of the Black Sturgeon river. In concessions I, II, III, it will be seen from my field notes, that there is clay soil to be found. This is the same as that found to the west, glacial deposit, but through this, there are to be found ridges of sand. Along the Black Sturgeon river, through concessions I, II, III, there are sheer cliffs on either side of the river, varying in height from 150 to 400 ft. These completely run out on the south side of the river in concession III. On the north side of the river the cliffs reach their highest point in the easterly part of concession III. From this point they gradually diminish in height to the west. These cliffs are of granite. At some places through the lots, both north and south

of the river, there are outcroppings of this same granitic formation. The following lots I consider to consist entirely of very excellent soil:—

Concession I, lots 5,

Concession II, lots 8, 9, 13.

Concession III, lots 9.

Concession IV, lots 3, 4, 10.

Concession V, lots 2, 3, 4, 11, 12.

Concession VI, lots 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16.

The following lots contain good soil but not of the same quality as found in those mentioned above; in some there may be found outcroppings of granite:—

Concession I, lots 4, 10, 12, 16.

Concession II, lots 2, 3, 4, 7, 10, 11, 12, 15.

Concession III, lots 1, 2, 3, 4, 5, 6, 10, 11, 16.

Concession IV, lots 1, 2, 5, 6, 7, 11.

Concession V, lots 1, 5, 6, 7, 8, 9, 10, 13,

Concession VI, lot 1.

The following lots contain very poor soil and I consider them to be worthless from an agricultural standpoint:—

Concession I, lots 1, 2, 3, 6, 7, 8, 9, 11, 13, 14, 15.

Concession II, lots 1, 5, 6, 14, 16.

Concession III, lots 7, 8, 12, 13, 14, 15.

Concession IV, lots 8, 9, 12, 13, 14, 15, 16.

Concession V, lots 14, 15, 16.

Concession VI, lots none.

It should be borne in mind that this report on lots is based upon the actual survey lines, not upon a thorough covering of the land throughout the entire lot. In concluding my remarks upon the soil in this township, I would say that at least sixty-five per cent of the soil met with is a clay, or light sandy loam, a very high percentage for the district. It will be noted from this result of the actual survey that it fully bears out the reports made to me by my men when investigating this country preliminary to the writing of the report which I submitted for your approval some time previous to the issuing of instructions for the survey.

TIMBER.

Hele township is very well timbered. There is little pine to be found, some few being encountered scattered throughout the township. The westerly half of the township, concessions IV, V and VI, is well timbered with excellent spruce running from 4 to 15 inches in diameter. There are quantities of this at an average of 10 inches. Some birch, balsam and cedar, running from 6 to 15 inches in diameter were met with in the westerly part of the township, but for the greater part there is practically nothing but the spruce as mentioned above.

In the easterly half of the township, spruce, birch and balsam from 3 to 15 inches were found—there being more of the birch and balsam here than in the westerly half, the spruce not being found in such quantities as in the westerly

half. Through the entire valley of the Black Sturgeon river good spruce was met with, both as regards quantity and quality. Excellent piling could be secured here to meet demands, now most urgent, for this in the cities of Port Arthur and Fort William—but some little difficulty would be encountered in getting this out, most of my men believing that the river would give trouble in handling of piling over 45 ft. in length. This belt of good spruce extends approximately a half mile on each side of the river. Some banksian pine is found along the hills bordering the river, this pine running from 3 to 10 inches in diameter. Throughout the township, some poplar is to be found, this for the greater part being small in size. In concluding these remarks on the timber, I would state that I have not seen a township much better timbered than Hele. The spruce is large, it is found in liberal quantities. I beg to refer you to my timber plan for details as to the timber in the several separate lots. You will note that the better timber is to be found on the land best adapted for farming.

GAME.

Moose and red deer are very plentiful in this township. In the river are to be found pike and black bass, no trout. The pike run to a large size.

LAKES.

The lakes met with in the survey of this township were of clear, cold water, fed by small streams from the hills. For the most part the banks are rocky. No fish were to be found in the lakes.

ROADS.

There are, of course, no roads in this township. It is easily accessible, however, from Nipigon by roads through Nepigon township and from Hurkett on the C.P.R. by trails and roads through Stirling township. With the exception of the lots bordering the Black Sturgeon river, the greater number of the lots could be reached by roads following the several concessions and lot lines of the survey. In most parts of the township these could be easily built at a comparatively small cost.

In conclusion I beg to state that throughout the survey of this township I have carefully followed my instructions with regard to the same. I have put special attention upon the soil and timber, and I believe my notes will fully cover all the lots as regards these details. I beg to enclose herewith plan and field notes, traverse plans and notes of the Black Sturgeon river and lakes. Trusting that my work and the report upon the same, may be found to be satisfactory,

I have the honour to be, Sir,

Your obedient servant,

(Signed) M. E. CROUCH,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ont.

Appendix No. 24.

SURVEY OF THE TOWN PLOT OF GRANT, IN THE DISTRICT OF THUNDER BAY.

NORTH BAY, ONTARIO, September 8th, 1916.

SIR,—Herewith we beg to report the completion of the survey of the townsite of Grant, on the National Transcontinental Railway, and in the district of Thunder Bay, performed under instructions from your department bearing date of May 31st, 1916.

Grant is a divisional point on the National Transcontinental Railway, 254 miles west of Cochrane, and promises to become a very important railway point. Even at the present time, the railway there undertakes repairs of a fairly heavy order; and, as the shops there are designed for heavy order work, the added population will be a natural result to the traffic acceleration. To the townsite there is tributary a very large area of first-class arable land of the usual spruce-timbered, moss-covered, clay loam type. The future, therefore, of Grant from an agricultural viewpoint, appears to be very bright.

The townsite is quite level, but with a good natural drainage to the north. The best drained lots, at the present time are in the row fronting the track and running from Second avenue east; and in the second and third rows of lots on the curve. The balance of the townsite, while wet at the present time, will be quite dry when the spruce bush is cut down and the moss capping burned off.

All four angles of each lot were staked, all stakes being of spruce and squared 3 inches or better on the face, and well driven home. On these posts were marked with black paint the numbers of the adjoining lots or streets. At certain block corners, iron stakes were planted and these were similarly marked with a cold chisel.

First avenue was made to coincide with the sewer which at present runs about three-quarters of a mile north from the track to empty into a small lake. Except between First and Second avenues the townsite is four lots deep, each of 132 feet depth. All regular lots are 66 feet in width, the irregular widths occurring at First avenue, Fourth avenue, and on the curved portions of the townsite.

There are already certain private buildings on the townsite, and these are all laid down on the plan and detailed in the list of lots.

The field work was commenced on the 31st of July and completed on the 12th of August.

Accompanying this report are a plan of the townsite on a scale of 200 feet to an inch, a list of all the lots, and the customary returns consisting of pay roll, vouchers, etc., etc.

All of which is respectfully submitted.

We have the honour to be, Sir,

Your obedient servants,

(Signed) MCAUSLAN & ANDERSON.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 25.

SURVEY OF THE TOWNSHIP OF CODY, DISTRICT OF TIMISKAMING.

January 14th, 1916.

SIR,—In accordance with instructions to Ontario Land Surveyor, C. H. Fullerton, to sub-divide the township of Cody, district of Timiskaming, bearing date of July 9th, 1915, which instructions have been transferred to me by your letter of November 29th, 1915, I have to report as follows:—

The instructions have been carried out to the letter with the exception of the lines between concessions II and III, the line between concessions III and IV and the line between concessions V and VI. These lines were run west to the west boundary of the township of Cody from points in the north and south line between lots 10 and 11. In the first case the error was $13\frac{1}{2}$ links south of the 122nd mile post; in the last two lines between concessions III and IV, and V and VI, the error was 11 links, each line hitting south of mile-post 123 and 125. The reason of the survey being made in this manner was to save time, and Mr. Fullerton, who delivered me the instructions informed me that he had arranged this with your department in Toronto.

The lines were all run with a transit and well cut out and blazed. Every care was taken to make the survey accurate. In every instance posts were planted in the best possible manner and bearing trees were taken at all points with the exception of the road posts at the intersection of the line between concessions V and VI with the Porcupine river, the intersection of the line between concessions II and III, I and II, and the line between lots 8 and 9 with the westerly water's edge of Night Hawk lake. These points were all in muskeg or swampy ground and bearing trees were not within reasonable distance.

TIMBER.

The southerly part of the township of Cody up to within 10 chains more or less of the line between concessions IV and V, has been burned over and the timber is, therefore, of no value. The fire has not gone through and burned the ground clean, but has left the bush in a very bad condition as the timber now is mostly all windfall. The line between concessions IV and V is all in green timber, and north of the line none of the timber has been destroyed by fire. The timber consists, in this part of the township, of spruce, balsam, birch and poplar with practically no jack pine. The spruce is most predominant and is from 4 to 16 inches in size, the largest percentage of it being of pulp wood size. Balsam comes next in quantity and runs from 4 to 14 inches in size. The birch and poplar are both fairly abundant and run from 6 to 16 inches.

SOIL.

The soil of the whole township, with the exception of lot 8 in concessions I, II, III and IV, which are very swampy, and a few outcroppings of rock, is a very good clay loam suitable for agriculture.

MINERALS.

There is an outcrop of diabase on a line between lots 10 and 11, concession III, and also on a line between concessions III and IV, on lot 11. Above this line, on the line between lots 10 and 11, concession IV, there is an outcropping of Keewatin schist. There were no other outcroppings south of this and none north with the exception of the peninsula on the northerly end of Night Hawk lake. It would appear that the northerly portion of the township is of Keewatin schist in formation, and the southerly portion of diabase.

LAKES.

The interior lakes of the township of Cody consist of one small lake in lot 7, concession VI, which is very nearly round and about $\frac{1}{4}$ mile across. This appears to be a spring lake as the water is very clear.

Together with this report I am forwarding you the field notes of the township of Cody, a timber plan showing area of the valuable timber, and a plan of the survey.

Trusting that you will find the above plans accurate and suitable,

I have the honour to be, Sir,

Your obedient servant,

(Signed) T. G. CODE.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 26.

SURVEY OF THE TOWN PLOT OF ARMSTRONG, IN THE DISTRICT OF THUNDER BAY.

NORTH BAY, ONTARIO, September 8th, 1916.

SIR,—Herewith we beg to report the completion of the survey of the townsite of Armstrong, on the National Transcontinental Railway, and in the district of Thunder Bay, performed under instructions from your Department bearing date of May 31st, 1916.

The townsite lies in a territory very much broken up with fish-bearing waters, and with a soil of a very sandy character. The agricultural possibilities, therefore, of the surrounding country are not so extensive as at all the other divisional points on this railway in Ontario and east from this point.

The four angles of each lot were all staked, the corner stakes being made three inches or better on the face, and well driven home. On each stake the number of the adjoining lots or streets were marked with black paint. Iron posts were planted at certain block corners as noted on the plan, and these were similarly marked with a cold chisel.

The townsite, being very rolling and with a sandy soil, has, therefore, a very excellent natural drainage. The station buildings, at the present time, empty their raw sewage into the right-of-way ditch, into which also flows the creek that traverses lots 22, 66, 101, 102, 141, 142, and 181.

There are at the present time numerous private buildings on the townsite; these are all shown on the plan and listed in detail on the list of lots.

The field work was commenced on the 13th of August and completed on the 29th of August.

Accompanying this report are a plan of the townsite on a scale of 200 feet to an inch, a list of all lots, together with the customary returns consisting of pay roll, vouchers, etc.

All of which is respectfully submitted.

We have the honour to be, Sir,

Your obedient servants,

(Signed) MCAUSLAN AND ANDERSON.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 27.

SURVEY OF PART OF THE TOWNSHIP OF CAVELL, DISTRICT OF SUDBURY.

PETERBOROUGH, ONTARIO, March 22nd, 1916.

SIR,—I have the honour to submit herewith the field notes and plans of the survey of part of the township of Cavell, in the district of Sudbury, performed by me under instructions from your Department dated October 23rd, 1915.

As instructed I commenced the survey at the intersection of the Meridian line run by O.L.S. Stewart in 1891 and the southerly limit of the original right-of-way of the Canadian Pacific Railway. Here I found a mound of small stones, the iron and wooden posts having both disappeared, from this point I retraced O.L.S. Stewart's Meridian to the south-east angle of the township, at which point I found the iron post planted by him in 1891. Having secured a satisfactory observation for azimuth at this point, I ran the front of concession I due west astronomically two miles making lots 1, 2, 3 and 4 each 40 chains in width, and from the points thus established I ran the side lines between lots 2 and 3 and 4 and 5 north astronomically to the north limit of concession IV. The lines for the fronts of concessions II, III, IV and V were run due west astronomically from points established on O.L.S. Stewart's Meridian and the northerly production thereof.

That portion of the township surveyed by me comprises an area of 5,122.24 acres and may be described, as a whole, as gently undulating in character. It has been swept over many times by fire so that with the exception of that in the swamps little of the original timber now remains, the second or present growth being made up, for the most part, of small poplar, birch, alder, willow and some jack pine, now generally known as *brulé*. I would consider fully sixty per cent. of that portion of the township subdivided by me very fair farming land, being a clay or

sandy clay loam fairly free from stone and from eight to twelve inches in depth resting on a gravel subsoil. This land may now be very easily cleared and I feel quite sure that if its location and accessibility were generally known it would be very quickly taken up and settled upon.

The swamps which make up probably fifteen to twenty per cent. of the total land area present the usual characteristics, in some places soft and peaty, at others of a firmer consistency, especially where found resting on a clay or gravel sub-soil. There are, of course, as is common to nearly all this section of Northern Ontario, low rocky bluffs and ridges, but the proportion of good arable land in this immediate locality I believe to be far above the average found in this section of Ontario.

This tract is well watered by numerous lakes, creeks and ponds all of which contain beautiful clear palatable water. The Canadian Pacific Railway's Trans-continental line crosses the 3rd and 4th concessions, through lots 1, 2, 3 and 4, in this division it is a double track system and neither time nor money seems to have been spared in making the roadbed as nearly perfect as possible.

A good wagon road leading to the Shannon limits on the Spanish river waters extends southerly through the easterly section of township and is well located for the purpose of colonization. There is at present but one settler in that part of the township subdivided by me, viz.: George Boucher, who is settled on the west part of lot 1, in the 3rd concession, he has about seven acres cleared, good comfortable house and outbuildings, has several head of cattle, hogs, hens, etc., and altogether is very happily and comfortably situated.

Considering the adaptability and accessibility of this district for settlement I would respectfully suggest to your Department the advisability of extending this survey and opening up that part of the country for settlement as soon as possible. A round iron post one and one-quarter inches in diameter and three feet long furnished to me by your Department is planted at the intersection of side line between lots 4 and 5 and the line in front of concession V, this post is marked "Con. V" on the north side, "Con. IV" on the south side, "Lot V" on the west side and "Lot IV" on the east side, it has also the name "Cavell" marked on the south-east side. At all other intersections of side lines and concession lines surveyed by me are planted solid iron posts seven-eighths inches square and two feet six inches long. These posts are planted at the exact points where the various concession and side road lines intersect; they are driven within eight inches of the surface of the ground and have the numbers of the lots and concessions marked with a cold chisel on the respective sides thereof.

Fish, game and fur of the usual kind common to this section of the Province are to be found in abundance. Frequent observations for azimuth were taken on Polaris at elongation; also solar observations for latitude, records of which will be found in the notes.

Trusting that this report and the accompanying plans, field notes, etc., of the survey will be found complete and satisfactory to your Department.

I have the honour to be, Sir,

Your obedient servant,

(Signed) J. W. FITZGERALD,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 28.

SURVEY OF PART OF THE TOWNSHIP OF HALL, DISTRICT OF SUDBURY.

PETERBOROUGH, ONT., March 22nd, 1916.

SIR,—I have the honour to submit herewith the field notes and plans of the survey of part of the township of Hall in the district of Sudbury, performed by me under instructions from your Department dated October 23rd, 1915.

I commenced this survey at the north-east angle of the township, from this point I produced O.L.S. Stewart's Meridian line due south astronomically giving concessions VI and V a depth of eighty chains each, and from the points thus established I ran the lines for the fronts of concessions V and VI due west astronomically to the west limit of lot 4. Lots 1, 2, 3, and 4 having been previously laid out by me and given a width of forty chains each; along the north boundary of this township I ran the side lines between lots 2 and 3 and lots 4 and 5 south astronomically to the south limit of concession V.

That portion of the township surveyed by me comprises an area of 2,562 acres. As this township lies immediately south of and is very similar in its general characteristics to the township of Cavell, on which I have just reported very fully, I do not consider it will be necessary to repeat this information.

As will be seen by the plan a very considerable area of this part of the township is covered by the waters of Grassy and Tassie lakes. It will also be noticed that there is a considerable area of drowned land.

A good wagon road leading to the Shannon limits on the Spanish river waters crosses the easterly subdivided part of the township.

A round iron post one and one-quarter inches in diameter and three feet long furnished to me by your Department is planted at the intersection of the line in front of concession V with the side line between lots 4 and 5. This post is marked "Con. V" on the north side, "Con. IV" on the south side, "Lot V" on the west side and "Lot IV" on the east side. It has also the name "Hall" marked on the north-east side. At all other intersections of side lines and concession lines surveyed by me are planted solid iron posts seven-eighths inches square and two feet six inches long. These posts are planted at the exact points where the various concessions and side lines intersect, they are driven within eight inches of the surface of the ground and have numbers of the lots and concessions marked with a cold chisel on the respective sides thereof.

Fish, game and fur of the usual kind common to this section of the Province are to be found in abundance. Frequent observations for azimuth were taken on Polaris at elongation. Also solar observations for latitude, records of which will be found in the notes.

Trusting that this report with the accompanying plans, field notes, etc., of the survey will be found complete and satisfactory to your Department.

I have the honour to be, Sir,

Your obedient servant,

(Signed) J. W. FITZGERALD,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 29.

SURVEY OF PART OF THE TOWNSHIP OF JOFFRE, DISTRICT OF SUDBURY.

PETERBOROUGH, ONTARIO, March 22nd, 1916.

SIR,—I have the honour to submit herewith the field notes and plans of the survey of part of the township of Joffre, in the district of Sudbury, performed by me under instructions from your Department dated October 23rd, 1915.

Having already surveyed parts of the townships of Hall and Carew lying immediately west and north, respectively, of this township, and having made concessions V and VI on the east boundary of Hall eighty chains each in depth, and having made lots 12, 11, 10 and 9 forty chains each in width along the south boundary of Carew, I produced the lines between concessions IV and V and V and VI of the township of Hall due east astronomically to the east limit of lot 9. I also produced the side lines between lots 11 and 12 and 8 and 9 of the township of Carew due south astronomically to the south limit of concession V. That portion of the township surveyed by me comprises an area of 2,558.12 acres.

As this township lies immediately south of and is very similar in its general characteristics to the township of Carew, on which I have just reported very fully, I do not consider it will be necessary to repeat this information.

As will be seen by the plan, this township is considerably cut up by Vernon or Ramsay lake and Turbull creek or Pogamasing river, which enters the lake on lot 9, concession VI.

A good wagon road leading to the Shannon limits on the Spanish river waters crosses the north-west angle of the township.

A round post one and one-quarter inches in diameter and three feet long, furnished to me by your Department, is planted at the intersection of side line between lots 8 and 9 and the line in front of concession V, this post is marked "Con. V" on the north side, "Con. IV" on the south side, "Lot IX" on the west side and "Lot VIII" on the east side. It has also the name "Joffre" marked on the north-west side. At all other intersections of side lines and concession lines surveyed by me are planted solid iron posts seven-eighths inches square and two feet six inches long. These posts are planted at the exact points where the various concession and side road lines intersect; they are driven within eight inches of the surface of the ground and have the numbers of the lots and concessions marked with a cold chisel on the respective sides thereof.

Fish, game and fur of the usual kind common to this section of the Province are to be found in abundance. Frequent observations for azimuth were taken on Polaris at elongation, also solar observations for latitude, records of which will be found in the notes.

Trusting that this report with the accompanying plans, field notes, etc., of the survey will be found complete and satisfactory to your Department.

I have the honour to be, Sir,

Your obedient servant,

(Signed) J. W. FITZGERALD,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 30.

SURVEY OF PART OF THE TOWNSHIP OF CAREW, DISTRICT OF SUDBURY.

PETERBOROUGH, ONT., March 22nd, 1916.

SIR,—I have the honour to submit herewith the field notes and plans of the survey of part of the township of Carew, in the district of Sudbury, performed by me under instructions from your Department dated October, 23rd, 1915.

Commencing at the south-west angle of this township I retraced O.L.S. Stewart's Base Line a distance of two miles east making lots 12, 11, 10 and 9 forty chains each in width, and from the points thus established I ran the side lines between lots 10 and 11 and 8 and 9 due north astronomically to the north limit of concession IV, the lines for the fronts of concessions II, III, IV and V were run due east astronomically from points already fixed by me on O.L.S. Stewart's Meridian.

That portion of the township surveyed by me comprises an area of 5,101.79 acres and may be described as gently rolling or undulating in character. It has been swept over many times by fire so that with the exception of that in the swamps little of the original timber now remains, the second or present growth being made up, for the most part, of small poplar, birch, alder and willow and some jack pine now generally known as *brulé*. I would consider fully sixty per cent. of that portion of the township subdivided by me very fair farming land, being a clay or sandy loam from eight to twelve inches in depth, fairly free from stone and resting on a gravel sub-soil. This land may now be very easily cleared and I feel quite sure that if its location and accessibility were generally known it would be very quickly taken up and settled upon.

The swamps, which make up probably fifteen to twenty per cent. of the total land area, present the usual characteristics, in some places soft and peaty, at others of a firmer consistency, especially where found resting on a clay or gravel sub-soil. There are, of course, as is common to nearly all this section of Northern Ontario, low rocky bluffs and ridges, but the proportion of good arable land in this immediate locality I believe to be far above the average found in this section of Ontario.

Considering the adaptability and accessibility of this district for settlement I would respectfully suggest to your Department the advisability of extending this survey and opening up that part of the country for settlement as soon as possible.

A round iron post one and one-quarter inches in diameter and three feet long furnished to me by your Department, is planted at the intersection of side line between lots 8 and 9 and the line in front of concession V, this post is marked "Con. V" on the north side, "Con. IV" on the south side, "Lot IX" on the west side and "Lot VIII" on the east side. It has also the name "Carew" marked on the south-west side. At all other intersections of side lines and concession lines surveyed by me are planted solid iron posts seven-eighths inches square and two feet six inches long. These posts are planted at the exact points where the various concession and side road lines intersect, they are driven within eight inches of the surface of the ground and have the numbers of the lots and concessions marked with a cold chisel on the respective sides thereof.

The Canadian Pacific Railway's Transcontinental line crosses the first, second and third concessions, through lots 9, 10, 11 and 12. In this division it is a double track system and neither time nor money seems to have been spared in making the roadbed as nearly perfect as possible.

A good wagon road leading to the Shannon limits on the Spanish river waters crosses the south-west corner of the township.

Mr. Shannon, of Bisco, has a clearing of about twenty-seven acres located on lots 11 and 12 in the third concession. There are also two settlers in that part of the township surveyed by me, Nazareth Darby is located in a triangular piece of land on the south-east corner of lot 12, concession 3. He has a house built and five or six acres cleared. Donar Lefonte is located on lot 12, concession 2, he has a house built and has about six acres cleared on this lot.

This tract is well watered by numerous lakes, creeks and ponds, and also by Turnbull creek or Pogamasing river, which flows southerly through the first four concessions of the township. This stream has an average width of thirty to fifty links and an average depth of from two to five feet. It has a fair current and is, I understand, used for the floating of logs and timber.

Fish, game and fur of the usual kind common to this section of the Province are to be found in abundance. Frequent observations for azimuth were taken on Polaris at elongation also solar observations for latitude, records of which will be found in the notes.

Trusting that this report with the accompanying plans, field notes, etc., of the survey will be found complete and satisfactory to your Department.

I have the honour to be, Sir,

Your obedient servant,

(Signed) J. W. FITZGERALD,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 31.

SURVEY OF THE TOWNSHIP OF OWENS, DISTRICT OF TIMISKAMING.

FORT WILLIAM, ONTARIO, January 31st, 1916.

SIR,—I beg to submit the following report on the survey of the township of Owens, in the district of Timiskaming, surveyed by me under instructions dated at Toronto, September 16th, 1915.

I proceeded to McPherson on the Transcontinental Railway, taking with me certain members of my party. I had already arranged with a surveyor then in the north country for a number of men, including a transit man, a chain man and eight axe men with boats, to meet me there, but on arriving found neither men nor boats. I then sent the men I had brought with me into the township to put up camp, etc., whilst I went to Cochrane and other points to secure men. This, of course, caused considerable delay, and did not give me as strong a party as could have been desired. Owing to the phenomenally wet weather

experienced, men were frequently leaving the party and others had to be secured. In the latter part of the season \$3.50 a day and board was asked by axe men and packers and \$3.00 paid, with bonuses.

This township was laid out with a double front on each concession road allowance as run on the ground. The centre lines of concession and side roads were well opened up and blazed. Particular care was taken in the planting of durable and substantial posts, all plainly marked, in accordance with the instructions. For this purpose spruce, cedar or tamarac was used. Iron posts were planted alongside the wooden posts at the points indicated on the projected plan sent me with my instructions. The wooden posts were planted on the lines of survey and on the limits of the road allowances. Bearing trees were taken to these latter posts. In only one case did the front angles of lots come in a river, namely, those between lots 2 and 3, in concessions 4 and 5. In this case the lines were projected north and south and the posts planted one chain from the water's edge, guide posts being planted near the shore.

Although this work was performed late in the season the posts were firmly planted as there was no frost in the ground except a little at some few high spots. In fact rain or sleet fell every day but two during the course of the survey. This made the country extremely wet and the packing and locating of suitable camp sites extremely difficult. Certain check chainages which were required were left to be obtained after the freeze up, but the latter part of December, beneath two and a half feet of snow, the ground was still soft and wet making the work extremely arduous.

The National Transcontinental Railway crosses part of this township in a north-westerly direction. Along this railway I laid out a road allowance one chain in perpendicular width on either side of the same. In planting posts along this right-of-way I adhered to the instructions, as shown on the field notes. Before marking these lots adjoining the railway I wrote to the Department for full information as to the same.

I showed a road allowance of one chain in perpendicular width along each bank of the Kapuskasing river, and a similar road allowance around the lakes met with in the survey, except in the case of one small lake which was not cut by the road allowance. The only other river encountered in this survey was what is known as the Lost river. This river is less than a chain in width for the greater part of its length, is overgrown with alders and willows, rendering it hardly more than a creek; for the greater part of its course in the township it was found impossible to use a canoe on it; this was not traversed.

I made no traverse of the Kapuskasing river, having been instructed to that effect, but careful ties were made to the bearing trees noted at the time of the river traverse by Messrs. Sutcliffe & Neelands.

In my instructions I was told to take observations for azimuth at least once a week to verify the direction of my lines. However, owing to the almost continuous rain before referred to, it was found to be impossible to obtain more than two observations throughout the entire course of the work, these being the only occasions when the sky was sufficiently clear to allow of this being done, although an extra instrument was kept in camp for the purpose. Practically half the township was completed before the first observation was obtained. My concession lines were run off the east limit of the township, the latter line having been run some years before. Great care was taken in starting these lines, trial lines being run for some distance along the east boundary when satisfactory pickets could not

be found thereon. Owing to the lack of observations in the early stages of the work it was difficult to make the usual corrections in the direction of lines, it being impossible to determine which of two converging lines was correct.

TIMBER.

The timber throughout the township is for the greater part spruce, varying in size from 2 to 8 inches, much good for pulpwood, but little good for other purposes. For about a mile on each side of the Kapuskasing river some larger timber was found consisting of spruce, birch, poplar and tamarac, from 10 to 18 inches, with small quantities of cedar near the water. As shown in the notes there are a number of poplar ridges running through the township with poplar from 8 to 12 inches.

SOIL.

The soil is of clay throughout the entire township; this clay is covered with moss sometimes three feet or more in depth. At the time this survey was performed there was a considerable quantity of water throughout the township due to the unusual rains. Due regard has been paid to this fact in the field notes and little mention made of the water, it being realized that this water will not be standing in normal times. It will be understood that several of the smaller creeks shown in my field notes are merely creeks draining off this water, and that these will not exist in normal times. Due attention was paid to this in the notes and care taken not to exaggerate the size of these smaller streams.

MINERALS.

No minerals were met with in the course of the survey, the entire township being of clay formation.

GAME.

The larger game appear to have gone farther back from the railway, but fur-bearing animals, mink, marten, beaver, etc., are plentiful.

There are no roads nor trails throughout this township except along the Kapuskasing river, these having been made by prisoners from the internment camp. All parts of the township are, however, readily accessible, or will be when the standing water mentioned above has run off.

I have endeavoured to follow the instructions to the best of my ability with regard to the running of the lines, the planting of posts, and the compiling of the plan and field notes, and trust that everything, upon inspection, will be found satisfactory.

I have the honour to be, Sir,

Your obedient servant,

(Signed) E. R. BINGHAM,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 32.

Honourable G. H. Ferguson, Minister of Lands, Forests and Mines, Toronto, Ont.:

DEAR SIR,—I beg to hand you herewith detailed statements of “Applications for Loans” received from settlers, and also of loans granted, up to October 31st, 1916, summary of which is as follows:—

LOANS TO SETTLERS NORTHERN AND NORTH-WESTERN ONTARIO.

During the period from August 12th, to October 31st, 1916, the number of applications received was 606, covering an aggregate amount of \$230,800 distributed as under:—

<i>District.</i>	<i>Number.</i>	<i>Amount.</i>
Nipissing	8	\$3,000 00
Temiskaming	375	140,175 00
Sudbury	6	2,800 00
Algoma	17	6,400 00
Thunder Bay	146	57,075 00
Kenora	47	18,400 00
Rainy River	7	2,950 00
Total	606	\$230,800 00

Owing to the conditions existing in the district of Temiskaming during this time every effort was made to grant as much assistance as possible to those desiring loans in that district, and after inspections had been made a total of 121 loans were granted to the amount of \$36,525, as follows:—

<i>Crown Lands Agency.</i>	<i>Number.</i>	<i>Amount.</i>
Haileybury	2	\$500 00
New Liskeard	15	5,225 00
Englehart	19	4,675 00
Matheson	36	14,550 00
Cochrane	49	11,575 00
Total	121	\$36,525 00

Consideration is now being given to all the other districts, and from the number of applications which have been received since the Act has been put into effect, it would appear the settlers generally are desirous of taking advantage of the opportunity presented to secure funds for the further improvement of their farms.

Yours very truly,

F. DANE,

Settlers Loan Commissioner.

Appendix No. 33.

ALGONQUIN PROVINCIAL PARK REPORT, NOV. 1916.

HONOURABLE SIR,—I beg to hand you my report for the fiscal year ending October 31st, 1916.

Our staff has been composed of thirty-two rangers and superintendent, three of whom have been absent all year, having enlisted for overseas service. Ranger Stringer went over early, and is employed with the Forestry Battalion; Major Robinson has been occupied in various ways in recruiting, and is now overseas; Lieut. Callighan is still in Barrie; this leaves a staff of twenty-nine rangers engaged in park work. One of these, Robert Balfour, I regret very much to say, was five months ago stricken with paralysis, and I fear will never be fit for work again. He served faithfully as a ranger for over twenty years.

This has been a most fortunate year so far as forest fires are concerned; we have had several start, but all were put under control quickly, and no damage whatever was done. The fire tank stationed here by the Grand Trunk railway is a great safeguard, as it is always ready and can be taken out by the engine of the nearest train to any point along the line where fire starts. The phone line too has been of great assistance in enabling us to get word quickly and summon help where needed. Perhaps the greatest help has been the cleaning up of the right-of-way, and a distance into the woods on each side. This work, in accordance with your instructions, has been continued, but, I am sorry to say, not so much accomplished as I had hoped, owing to the difficulty in procuring men. Notwithstanding we offered much larger pay than formerly, men could not be had at any wage. We have cleaned about forty miles, on each side of the track, greatly improving the appearance, and being of incalculable value as a fire preventative. This is through the section where the woods are of most value. There are parts that have been completely burned over. It will take another year to complete this work. The task has been greater than at first would appear, as the road allowance or right-of-way was never logged, and brush cut year after year was allowed to remain where it fell, making a slash and fire trap almost up to the rails. It really represents logging, stumping and burning a strip eighty miles long by one hundred and fifty to two hundred feet wide and in places even more. There is no doubt this work has already been the means of saving a great deal of territory from fire. The cleaning up has been done by hired help under the direction of one of our staff, and the Government team has been used right through. The men are under canvas and move along as the work requires. The Grand Trunk Railway pays half of the entire expense.

The rangers to the north, along the line of the Canadian Northern Railway now completed through the north end of the park, were early in the season supplied with speeders. These have proved of great assistance in enabling them to get quickly to any fire started along the track, and they have been able to give material assistance to the regular fire rangers. I have recently returned from a trip through the north section where I found game of all kinds had very much increased, especially in the new section where previously it had been all trapped out. Beaver were in evidence everywhere and have already begun to dam up the ditches along the new railway. At Brent, located on Cedar lake, the Canadian Northern have made a large clearing and have put in extensive sidings, built large round houses, a turn table, etc., and purpose making this a divisional point. I

found two of their employees here had built houses on the lake shore, thinking so long as they were within the one chain allowance it was permissible. Our ranger at that point forbid them to go on with the work, but they finished the houses. One of the men has since been removed, and has rented his house. I would recommend that the Department make some arrangement with the railway people, whereby they will see that their employees do not build shacks at this and other points along the line within the park boundaries. I think the company should be required to provide proper accomodation for all men in their employ where their line runs through the park. They have built good section houses at all points where required. The worst place will be Brent, where several men will be stationed the year round. It might be well to supply our rangers with printed notices on linen forbidding parties to erect buildings of any kind without the Minister's permission. The question of summer hotels will no doubt come up



Rock cut, Canadian Northern Railway, Algonquin Provincial Park.

during the coming year, and it would almost seem necessary to allow one at Brent as there is no doubt the northern lakes will be very popular owing to the excellent fishing in these waters, but for the present I do not consider it would be at all advisable to grant leases along this line to tourists and others.

I have reported to your Department on the matter of the Indian farm on Manitou lake, which has reverted to the Crown. I think it very important that the Government should retain this lot, but would recommend allowing the old Indian couple who have lived there for nearly fifty years to remain for their life term, making them some compensation for the clearing and buildings. I have visited the point on Couchon lake applied for by the firm of Richie Bros., of Aylmer, Que., for the purpose of erecting a mill to cut their lumber there instead of making the long and expensive drive by water to Aylmer. The country to the north of this point, all burnt for a distance north of the park line, is not far from the piece

of land asked for; at the same time I regret that all the young pine on these limits should find its way to the saw instead of becoming the property of the Crown.

I was much gratified to note the rapidity of growth in the young pine through the Pembroke Lumber Company's limits recently acquired by the Government. A few years hence no one will doubt the wisdom of that purchase. I sincerely hope more of that section will be bought and the fine young growth protected. Nature is doing a great work through these depleted sections, and if only protected, splendid young pine forests will be handed down to the next generation.

We have built five new shelter houses during the past year, all good substantial buildings; two of these are on the west side, one south of the Grand Trunk railway, and one at Big Tea lake. At Kiosh-ko-qui we have built a large frame storehouse and workshop, this being our main point on the new (Canadian Northern) railway I have also arranged with the railway company to allow us to put in a phone here



Stand of young pine, Petawawa limit, acquired from Pembroke Lumber Company, Algonquin Provincial Park.

and tap their phone line, the only expense being the phone. This will give our men phone connection between North Bay and Pembroke. At Grand lake we have built a good frame shelter; this too is on the line of the Canadian Northern Railway at a station called Achray, giving us good buildings at Coristine, Brent and Achray. A daily train is now being run over this line, a mixed train of freight and passenger between Pembroke and North Bay remaining over night at Brent. There are nine stations in the park.

During the past year we have completed the Government phone line from Painy lake to Kearney, a distance of sixteen miles. At this point we connect with the Bell Telephone Company, and now have a well-equipped line from Whitney to Kearney, sixty-one miles. We hope to get a good revenue from this line in the future. The Bell line at present is overloaded between Orillia and Toronto, and they confine our service, except upon Government business to points between Orillia

and North Bay. This I hope before the tourist season comes on again will be changed; as many of our summer visitors want long distance connection. Last summer we talked with Detroit with perfect satisfaction. The ticking of a watch can be heard from one end of our line to the other, and I consider we have one of the best local lines in the country. We have phones at eleven different points along the sixty-one miles.

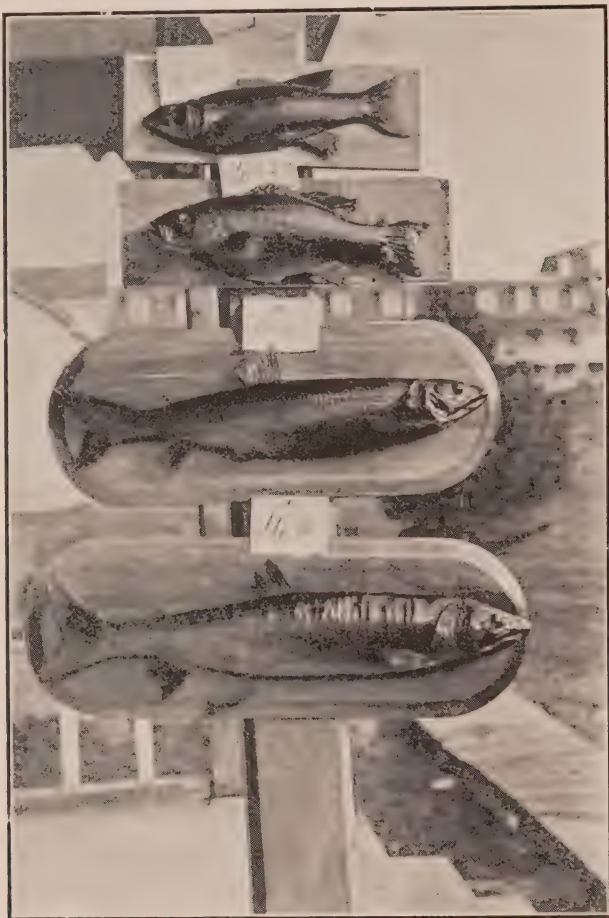
Substantial improvements have been made at headquarters. Cement walks have been built four feet wide to replace the old plank walks; bath rooms and all up-to-date sanitary arrangements have been put in at both houses, and a large septic tank upon the most approved plans has been installed; a cement basement has been put under the kitchen at the superintendent's house, the foundation having rotted, making this necessary. All this work, beside cutting wood, putting in ice, etc., has been done by our own men during times they were not required to patrol their beats, and at a cost of only the actual material used. During the trapping season our men constantly patrol their sections, each two men having a section which they are expected to patrol and keep in good shape with portages, etc., When we build, two sections go together and help one another, thus giving them four men, or six, if required. In this way our men help each other and we hire no other assistance.

Several cottages have been built at Cache lake during the past year, and several leases applied for and granted, the parties paying a \$10.00 survey fee and \$7.50 per year rent on each acre, the maximum being two acres. They get a twenty-one year lease. We have five school camps in the park; these pay an annual rental of \$75.00, and are allowed five acres. They are situated, one at Lake of Two Rivers, two on Cache lake, one on Source lake and one at Joe lake. These camps are a fine thing for the young people who are able to avail themselves of them, building them up in mind and body and filling them with a love of nature that cannot but make nobler men and women of them. The schools are well patronised; the girls in camp on Cache lake under Miss Case numbered sixty odd. We have two hotels and a boarding house; the Highland Inn at Cache lake, Hotel Algonquin at Joe lake, and Mowat Lodge at Canoe lake, besides the two cottage camps in connection with the Highland Inn; one at Big Island lake and one at Smoke lake. These have all been filled to overflowing, and many applicants had to be refused from lack of room.

Our sales of fishing permits were not quite up to last year, although we had a great many more people here. Our young men are away serving the Empire, and our visitors were principally parents and younger members of families who did not fish. Still we sold here fishing licenses to the amount of \$1,037; also guide's licenses \$35, and maps \$10. We collected \$495 in rents. These amounts do not include rents from the Grand Trunk Railway and hotels, which are paid direct to the Department. The fishing has been good, and some fine specimens taken. A quantity of fry and fingerlings has been put into the lakes near the railway by the Fish and Game Department.

Fur-bearing animals of all kinds are increasing rapidly. We had hoped to sell a number of live animals, but the war has destroyed this industry temporarily. We did, however, ship out seven live beaver to points in the United States at \$50 a pair. We are now in shape to handle live animals properly. Ranger J. Bartlett has invented a trap whereby we can take them alive without injury, and we have a splendid animal house, well supplied with water and all necessary equipment to handle them, and I have no doubt after the war a big business will be done in

live animals, for which we get a much better price than for the pelts alone. Furs were taken which were sold to the amount of \$2,322.65. We did not take out a large quantity owing to the state of the market. The annual increase of beaver must now be many thousand; it is therefore evident many can be taken out yearly and still retain a large part of the annual increase. Otter, mink, marten and fisher are also very abundant, while deer are in evidence in large numbers everywhere. The territory all round the park is a favourite hunting ground for several large clubs, and, of course, the deer from the park keep these sections replenished.



Some of last year's catch, Algonquin Provincial Park.

Lumbering in the park during the past year has almost been at a standstill, owing to the difficulty in getting men, and the depression in the market caused by the war.

We have had only a few minor breaches of the law, and I am glad to say conditions in that respect have very much improved. Several guns have been confiscated and sent to Toronto, as required by the park regulations. The Northern Development Branch under your instructions has made a great improvement in the roads from headquarters to Big Island lake, a distance of ten miles,

and Smoke lake, eight miles to the south. At each of these points the Grand Trunk Railway has log cottages and one large general camp. The cottages will accommodate six to eight people, while a number can be put up at the main camp, and all are supplied with meals at the latter. These camps are run in connection with the Highland Inn, and a daily stage runs from here to them. They have bath rooms, open fire places, etc., and the sanitary arrangements are good.

It would be a great boon to our towns and cities if we had a road into the park so that motor parties could run their cars right to this point; they now run as far as Kearney, within thirty miles of the road to Smoke lake and thirty-five miles west of headquarters.

I would recommend taking out a quantity of fur, especially beaver, for next spring's sale. The large increase warrants this, and the price of beaver pelts will no doubt be good, notwithstanding the open season, as the fur is fashionable this year again.

I would recommend putting in more fry and fingerlings again next year, both bass and trout. The lakes along the railway and near the hotels will require constant re-stocking, not only on account of their being fished more, but because, being head waters, they supply the lakes for a long distance down stream. In fact bass fishing is now good the entire length of the Madawaska river, where none were known before the lakes in the park were stocked. As the demand upon the hatcheries is large, I believe it is necessary to apply for fry and fingerlings early in order to secure them.

I have the honour to be, Sir,

You obedient servant,

G. W. BARTLETT,

Superintendent.

Honourable G. Howard Ferguson, Minister of Lands, Forests and Mines,
Toronto, Ont.

Appendix No. 34.

QUETICO PROVINCIAL PARK.

QUETICO PARK HEADQUARTERS, October 31st, 1916.

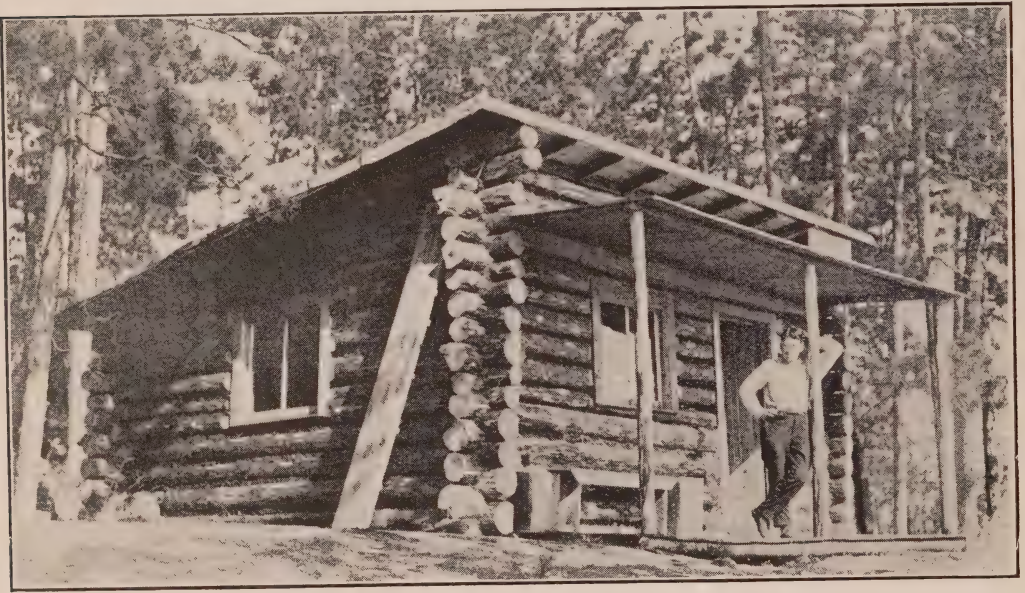
To the Honourable, the Minister of Lands, Forests and Mines, Toronto, Ontario:—

HONOURABLE SIR,—I beg to hand you my report on the Quetico Provincial Park for the fiscal year ending Oct. 31st, 1916.

At the present time our staff consists of superintendent and nine men. Three of my rangers enlisted during the past year, two of whom are wounded and are now in hospitals in England. I trust that your Department may re-instate some of these men if they are fit for service in the park on their return from the war. Two of them write me occasionally and request to be taken on my staff again if they survive. I would be pleased to have them as they are good men.

We had seven fire-rangers in the park during the fire ranging season, May 1st to Sept. 30th. Three fires occurred in the park last summer. One on a point on Knife lake on the International boundary, which burned about 500 feet in from the water, but did not destroy any timber. It was noticed in time by the park rangers in the vicinity, and extinguished before the timber was damaged. It is supposed that this fire started from a camp fire left unquenched by a party of surveyors on the International boundary survey.

Another fire, started by lightning on Shortiss island on August 2nd, burned the underbrush among the pine trees for about 80 acres, but did not do any great damage to the pine timber. A third fire occurred in July on timber berths 12 and 13 in the vicinity of Long lake, Ann lake and the west end of Quetico lake, which scorched quite a quantity of timber. This fire came in from the north from the direction of the Canadian Northern Railway, where a bad fire occurred during that



Ranger's cabin, Pickerel Lake, Quetico Provincial Park.

time. The Shevlin-Clarke Lumber Co., of Fort Frances, Ont., who hold the berths, are now preparing to cut the timber this winter.

Owing to the war and consequent scarcity of men in this vicinity during last summer it was almost impossible to secure sufficient suitable men to patrol the park properly. Men who would suit on land patrols along railroads and cut-over limits would not do here, as all of our travelling has to be done by canoes, and a man who is not a canoe man is useless in Quetico.

On account of scarcity of labour last season I had to abandon work on the wagon road from Eva lake to Kawene station, over which we have to haul our feed, provisions and other supplies. I hope next season to be able to put this road in good condition as during summer it is almost impassable.

On April 21st last we had a very heavy fall of snow, nine inches, which broke down many balsam and jack pine trees and blocked up our roads and portages all of which had to be cut out again. Snowshoeing last winter was the worst yet

experienced in this country. The rivers did not freeze over until well on in January. The lakes, owing to the heavy weight of snow were full of air-holes and covered with slush until March. The ice was very unsafe for travelling. I had my team in through the ice on three different occasions.

The high water in the spring washed out many of our portages and bridges, also many of our small landing docks.

We improved some of our shelter huts last summer, built one on an island in Agnes lake, and one at Prairie portage on the boundary. Many of the old portages were cleaned out and some new ones cut.

I consider it advisable to build several look-out towers next summer, say from thirty to forty feet in height, which could be done at small cost. This is a flat country and observations cannot be had for any distance from the hills.

I would suggest that a telephone line be erected from headquarters here to Kawene station on the Canadian Northern Railway. This would save much valuable time, as, for instance, a telegram sent me by one of my rangers stationed at Basswood lake, from Winton, Minnesota, in reference to a fire along the boundary



Moose in Sturgeon Lake, Quetico Provincial Park.

lay at Kawene for two days before I received it. No one from here happened to be out, and there is no way of getting from Kawene in here with a message. The line could be built around Eva lake a distance of twelve miles. Two hundred metal boundary signs were sent me by your Department in June last. Many of these were placed at portages and along canoe routes along the different boundaries. The balance of the signs will be placed next season.

The Canadian and United States Boundary Survey parties placed iron monuments at many points along the International boundary during the summer, which will be of great assistance to us in determining the boundary which, previous to this, was a very difficult matter. It is expected that the survey work along the park waters will be completed next year.

Game, especially moose and red deer are still numerous; very many were seen during the summer. Beaver are increasing very rapidly; in some places we will have to cut new portages owing to the flooding of the ones now used along streams and lakes where the beaver have built dams. Fisher are very plentiful, also foxes, but mink are very scarce. Quite a few otter were noticed this season.

Wolves are still numerous, quite a few were poisoned last winter, but owing to the frequent heavy snow falls many were lost. I found several when the snow went off in the spring. Owing to the difficulty in procuring bait it is not an easy matter to get them. Last winter we were fortunate to find some carcasses of moose killed by wolves in which we placed poison. I am pleased to know that a bounty is now paid for the killing of the smaller wolf, as he destroys much game.

The restriction placed on hunting of partridge is a good idea, and will give them a chance to increase as they are almost extinct here now. There are scarcely any rabbits in the park or surrounding woods this season.



Trout caught in Pickerel Lake, Quetico
Provincial Park.

A few flocks of ducks were seen in the lakes en route to the south. As there is no feed in these lakes for them they do not remain. We did not notice any signs of trapping or hunting in the park last winter. The Indians on the reserve at Lac La Croix do not come into the park as they used to. Some pass through on their way to Lac Mille Lac and other places, but apparently observe the regulations.

There were not so many tourists in the park as in 1915. The early part of the season was cold and wet and later on the flies were bad, which prevented many from taking their usual canoe trip. Many of them intend returning next year, as they are delighted with the canoe trips through Quetico.

At present we are engaged at headquarters in getting out fire wood for the

winter, and in fixing up the buildings. I had to get in some lumber and put a new roof on our stable and hay shed, the old roof was broken up during a wind and hail storm in August last.

On Oct. 16th the first snow fell and since that time we have had several snow falls. The snow is now fourteen inches deep, but as there is no frost in the ground I expect much of it will melt away.

I trust we may have a better season for travelling on the lakes and rivers than we had last winter.

I have the honour to be, Sir,

Your obedient servant,

A. J. McDONALD,

Superintendent.

Appendix No. 35.

COLONIZATION AND IMMIGRATION.

The following table shows the record of the work of this branch for the year ending October 31st, 1916, as far as it can be shown by statistics:—

Number of American farm labourers placed by Bureau of Colonization	600
Northern Ontario calendars circulated	50,000
Northern Ontario hangers: "A New Land Nearby," circulated	3,000
Northern Ontario booklet: "A New Land Nearby," circulated	20,000
"Ontario" handbook, circulated	5,000
Hangers: "Ontario, the Land of Opportunities," circulated	1,000
"Opportunities in Ontario" (Heaton's), circulated	20,000
"Farming Opportunities in Ontario" (Farm Property Values), circulated	11,000
Railway certificates to settlers going to Northern Ontario	1,224

Since the war commenced the only available country to canvass for emigrants therefrom is the United States. Farm labour being at a premium in our Province, it was unanimously decided at a conference in the office of the Minister of Agriculture held on February 24th, 1916, to send a number of agents to that country. These agents were instructed to be very careful in their selection of applicants and consequently the number secured was small in comparison with the numbers that applied. Out of about 3,000 applicants 600 were selected and placed on farms, where most of them gave general satisfaction. Many men interviewed were undesirable or of enemy origin. On the other hand, we experienced great difficulty in convincing favourable applicants that Canada was not under military conscription. The antagonism our mission met was due to misleading reports in certain American papers, to people that made it their business to dissuade intending settlers, to ignorance, to the enemy element, and to maliciousness on the part of rejected applicants. We are confident, however, that this difficulty will be overcome by the influence of men that have fulfilled their engagements with our farmers and that intend to return in the early spring, and by other men that have written favourable letters home, thereby inducing some of their friends and relatives to come. Another difficulty met, of a peculiar but not uncomplimentary character, was the voluntary enlistment of quite a number of our immigrants. Our antago-



Temiskaming
District Exhibit,
Canadian
National Exhibi-
tion, Toronto,
1916.

Kenora and
Rainy River Dis-
tricts Exhibit,
Canadian
National Exhibi-
tion, Toronto,
1916.



Thunder Bay
District Exhibit,
Canadian
National Exhibi-
tion, Toronto,
1916.

nists may, therefore, well reflect that a country worth fighting and dying for is one in which it is worth while to live and work.

The applications we had on hand from our Ontario farmers for farm hands called for from 7 to 12 months engagements, and we had no difficulty in getting the farmers to pay the amount we had to guarantee, namely, \$35.00 per month, with lodging, board and washing.

While our agents were in the United States they were also very active in advertising the opportunities in Northern Ontario. Apropos of that country's attractiveness is a comment on the report of its staff correspondent regarding "the spirit manifested by the sufferers from the late fire in the district north of Lake Timiskaming," by a leading newspaper:—

"The reader cannot fail to be deeply impressed by the invincible courage and 'buoyant optimism' of those settlers who have manifested and proclaimed their determination to stick to their burnt-over farms in spite of pecuniary losses and still more depressing calamities. There must be something inherently and enduringly attractive in a locality which has the magnetic power to counteract the



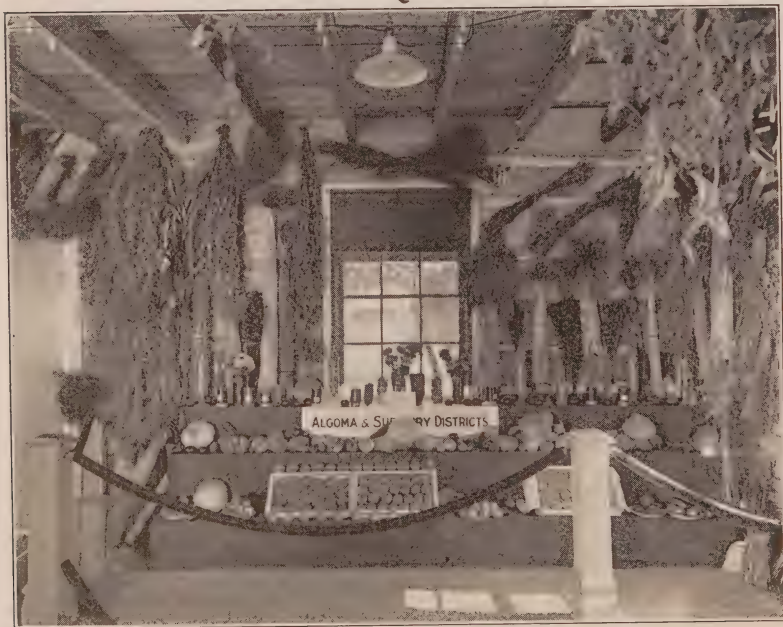
Interior Immigration Office, opposite Union Station, Toronto.

repelling force of such a disaster as they have passed through. 'Troubled, but not distressed, perplexed but not in despair, cast down but not destroyed,' they turn to the future with an unwavering faith in the resources of the soil and in their own ability to utilize them. 'The land is still there, and it is wonderful in its richness,' so wonderful that nothing short of actual contact with it can convey to the observer an adequate idea of the real truth.

"The secret of this 'richness' is not far to seek: It is in the fact that the soil is a calcareous alluvial clay. The infused lime seems to be of just the right amount and quality to make the clay friable, so that, unlike the old-fashioned clay of southern Ontario, it does not 'cake' into bricks. Laid bare to the sun from several feet below the surface it will become pulverized instead of being hardened into 'adobes,' so that there is no 'sub-soil' in the ordinary sense of that term. This peculiarity is so pronounced that it is hard in some places to keep up the open drains on the highways. The deep, fertile soil of the western prairie offers no agricultural advantage over the deep, fertile soil of the Northern Ontario forest, where the timber may be made to pay partially if not wholly for the clearing."



Immigration Office, opposite Union Station, Toronto.



Algoma and Sudbury Districts Exhibit, Canadian National Exhibition, Toronto, 1916.

After the Canadian National Exhibition closed we established in our Immigration Office, 172 Front St. West, Toronto, a permanent exhibit, small but representative of the field crops of Northern Ontario. The richness of the soil is emphasized by a collection of samples of fodder crops, such as clover, alfalfa and alsike, and by a number of native grasses (also good for fodder) that grow in profusion in the majority of the districts. These fodders and sheaves of fall wheat and oats with large heads and straw five feet in length, give manifest proof that Northern Ontario will not yield to any other part of Canada the first place in field crop production. The exhibit was well advertised and was the means of interesting hundreds of people regarding Northern Ontario. They seemed astonished at the grain and vegetables the country produced and at the natural resources with which it abounded. Here, at our own door of Ontario, they remarked, is a wonderful country, rich in land, timber and minerals, and where clover almost everywhere grows as a weed, and all that advantage to be freely had at the low price of fifty cents an acre.

Perhaps few people are aware that in this city the Government maintains an institution that is something more than a turnstile through which settlers pass to



Log Cabin, Canadian National Exhibition.

their new heritage. The reception room is comfortable, with proper facilities to accommodate women and children, and it is also a school where many things are taught to the profit of citizen and settler.

EXHIBIT AT THE CANADIAN NATIONAL EXHIBITION.

The Northern Ontario Settler's Home at the Exhibition this year, with exhibits from Timiskaming, Nipissing, Sudbury, Algoma, Thunder Bay, Rainy River and Kenora, in charge of the District Representatives and their assistants and also a representative from the Bureau of Colonization, was perhaps one of the most attractive features of the big show. A log house or bungalow may often be seen in Northern Ontario as well built as this one was. The heavy timbers were dovetailed together by an art almost unknown in the older parts of the Province, and its choice for the display of products, tastefully arranged from an agricultural standpoint, was as appropriate as it was effective. The logs were labeled, and some spruce logs gave an idea of the wood so much used for paper-making and certain classes of building. Thousands of people elbowed their way into this little log house from all parts of Canada and the United States but, of course, chiefly from our own Province. They evinced intense interest in the exhibits, and marvelled at the wonderful quality of grains and vegetables and at the country's enormous yield. Every visitor was presented with a pamphlet on Northern Ontario and with those that registered we are arranging correspondence that their interest may not be



lost. And we hope thereby to induce a good number to make their permanent home in the North.

ONTARIO GOVERNMENT EMIGRATION OFFICE, LONDON, ENGLAND.

The cut opposite shows the Ontario Government Emigration Office, which was built in 1911. The main object of this office in the Old Country is to advertise the agricultural resources of the Province and to encourage the emigration of farm hands and domestic servants.

For the past two years, or ever since the war started, their energies have been almost entirely devoted to doing what they could to assist our soldiers who have gone overseas, such as visiting the wounded, and to securing passports and vouching for Ontario people who require permits to enable them to travel in restricted areas.

H. A. MACDONELL,
Director of Colonization.

Oct. 31st, 1916.

Appendix No. 36.

REPORT ON THE CONSTRUCTION OF ROADS AND BRIDGES, THE CLEARING OF LAND
AND OPERATION OF EXPERIMENTAL FARM AND GARDEN PLOTS, AND THE
DISTRIBUTION OF SEED GRAIN, UNDER THE PROVISIONS OF THE
NORTHERN AND NORTH-WESTERN ONTARIO DEVELOPMENT
ACTS, 1912 AND 1915.

(During the Season of 1916.)

To the Honourable, the Minister of Lands, Forests and Mines:—

SIR,—I have the honour to submit a general report of the work done in the construction of roads and bridges, the clearing of land, the operation of Experimental Farm and Garden Plots, and the distribution of seed grain, under the provisions of the Northern and North-western Ontario Development Acts, 1912 and 1915, during the season of 1916.

The season's work on the construction of roads and bridges was continued throughout the winter of 1915-16, in re-surfacing roads with gravel, constructing bridges and taking out bridge timber.

In compliance with the Act passed at the Session of 1915, authorizing the distribution of seed grain and other seeds to settlers, it was found that in certain sections where the crops had been a failure in 1915 that unless the settlers were provided with seed grain they would be unable to purchase the same and would have been in a destitute condition this winter. The amount of seed granted to each settler on unpatented lands was limited to approximately \$25.00. Oats, potatoes and grass seed were purchased and distributed to the amount of 14,566 bushels to 1,097 settlers. The seed was forwarded to them to the nearest railway station at actual cost, the amount being placed as a lien against their lot, re-payable the 1st of December at six per cent. interest. Few, if any, complaints have been received from the applicants and general satisfaction has resulted.

With reference to the construction of roads and bridges, the season of 1916 has not been entirely satisfactory; snow fell to a great depth during the winter of 1915-16, from four to five feet in many sections of Northern Ontario. Heavy rains fell during the early part of April, and the winter broke up very suddenly,

resulting in high water and floods on many of the streams. Many of the lumbermen's dams constructed for driving purposes broke away and as a result carried out many of the bridges constructed on the trunk and colonization roads. The freshets had also the effect of washing out newly constructed roads and culverts, which had to be re-constructed at a considerable cost. Heavy rains fell during the early part of May and delayed road construction work considerably. In the latter part of July and fore part of August extensive forest fires swept over parts of the district of Temiskaming, destroying many miles of corduroy road, culverts and small bridges. The re-construction and repairing of these roads, culverts and bridges has materially reduced the mileage of new roads constructed this season.

Owing to a great number of our best settlers having enlisted, it was difficult to get sufficient labor to carry on the work in certain sections. Labor and supplies were also higher than in previous years and for this reason several roads which it was the intention of the Department to construct, have not yet been touched. Good progress, however, was made during the dry season and first-class results obtained from the amount expended.

Operations were carried on over practically the same territory as in previous years,—from near Petawawa in the east to Kenora in the west; in the Rainy river valley; along the Sault Ste. Marie branch of the Canadian Pacific railway from Sudbury west; along the Canadian Pacific railway from Sudbury east; in the Port Arthur and Fort William districts; in the Wabigoon district between Dryden and the Transcontinental railway; along the Canadian Pacific railway between North Bay and Sudbury; south along the Grand Trunk railway as far as South River; in the Algonquin Provincial park; along the Temiskaming & Northern Ontario railway and the Transcontinental railway as far west as Hearst; and in all the different mining sections.

Settlers or residents of a district only were employed, except in the construction of ditches or on rock work. The largest number of men employed was during the months of July, August and September, when the average number employed at day's labor was 2,300, and on contract work about 500, or about 2,800 in all.

During the season up to the 31st of October, the sum of \$513,533.75 was expended in the construction of roads and bridges, in the clearing of farm lands on both sides of the Grand Trunk Pacific railway east and west of the Kapuskasing river, and the construction of store-houses at the headquarters at Cochrane and Matheson, destroyed in the fires of July last; \$10,125.53 was expended in the clearing and operation of farm and garden plots, and the purchase of thorough-bred stock; \$24,916.63 was expended in supplying seed oats, potatoes and grass seed to 1,097 settlers; \$6,630.00 was expended in the purchase of grass seed to be distributed amongst settlers who were burned out in the country between New Liskeard and Cochrane, on the Temiskaming & Northern Ontario railway, and between Cochrane and Hearst; on the Grand Trunk Pacific railway. Of this amount 25,819 pounds have already been distributed to 414 settlers, the balance to be distributed early this spring. The distribution of this grass seed will be of very great benefit to the settlers; much of the land burned over last July and August was left almost ready for the plow. The seeding of this down in grass seed will give to the settlers in the future an abundance of pasture lands and a supply of hay and clover for their stock.

Approximately 500 miles of road, new and old, was worked over during the season, of which 180 miles is entirely new road, the balance being roads cut out in previous years, or roads re-graded and surfaced and old roads partially improved; 18 miles of road was re-surfaced with stone and 83 miles with gravel; 50 bridges,

small and large, were constructed, and 350 iron culverts placed and several hundred wooden. Many of the old roads built in previous years were gone over and repaired with the small grader or road drag. After the destructive fire of July and August, in the Temiskaming district, which burned out many of the culverts and small bridges, work was immediately started repairing the most important roads and renewing the culverts and bridges. In that district this occupied the greater portion of September and October.

The Experimental Farm and Plots were operated this season in continuance of the work started two years ago,—the garden plot in Cochrane and the farm plot two miles west thereof; the garden plot and farm at the Ground Hog river, 50 miles west of Cochrane; the garden plot at Hearst, 130 miles west of Cochrane; one at the Kapuskasing river, 70 miles west of Cochrane; and one at the Nagagami river, 170 miles west of Cochrane. The results from all of these farms and garden plots were as in previous years entirely satisfactory. Clover, alfalfa and timothy grew in great abundance on all the different farms, and in fact was a first-class crop throughout the whole of Northern Ontario. Two crops of clover were grown in many instances, netting over three tons per acre, the average of the first crop of timothy or clover being from two to two and one-half tons per acre. Fall wheat did exceptionally well where tested and averaged from 25 to 45 bushels per acre. It was not injured in any way by the summer frosts. Up to the present only small areas have been sown. From the results of our experiments and very careful examination of different fields grown by private individuals, it would appear that fall wheat will be produced profitably in these Northern districts. Spring wheat on the different farms and throughout the district was a fairly good crop; that sown early or about the 1st of May on fall plowed land did not appear to have been injured by the early frosts. Oats, peas, barley, rye and nearly all the different kinds of vegetables matured in the clay belt along the Grand Trunk Pacific railway and the Temiskaming & Northern Ontario railway. Little damage was done by summer frosts where the crops were planted reasonably early. I have noticed an improvement in the climatic conditions of the country each year during the last five years where settlement has taken place and the land cleared up. Crops did not suffer as much during the dry season in July and August in the clay lands in the district of Temiskaming as they did in the older parts of Ontario, or in the western districts, where the soil is not the rich clay or clay loam met with in the district of Temiskaming. Pasture was abundant throughout the entire season; even in the dry hot weather in July and the early part of August it did not suffer materially. Few finer crops were seen in Old Ontario than those grown in the clay belt last season. The extremely dry weather in July and August materially reduced the grain crops.

A settler's model house was erected on the Toronto Exhibition Grounds, from timber taken from Night Hawk and Frederickhouse lakes on the Frederickhouse river.

A very destructive forest fire swept over parts of Temiskaming district, resulting in a very great loss of life. Many of the settlers between Matheson and Cochrane lost all their belongings, buildings, farm stock and implements and crops. In point of lives lost in this fire, it is one of the most disastrous forest fires in the history of the Province. From an agricultural standpoint, in clearing up the lands and in improving the climatic conditions, good results will follow as it has done for many of the settlers more in clearing off their lands than they could accomplish in many years. I am glad to report that having travelled over the burnt over district after the fire, that the area burnt over and the loss of timber is not nearly

so great as was originally reported, and that this fire does not compare, in point of area burned and timber destroyed, with many of the earlier fires in the Province. This fire is more particularly described in the general report hereto attached.

The good results obtained from the different farm and garden plots and from the farms in general along the Grand Trunk Pacific railway and along the Temiskaming & Northern Ontario railway and its branches, has given to the settlers great encouragement this season, and has removed any doubt as to the future of this new district. All that is now lacking are settlers.

Good progress is still being made in the valley of the Rainy River, where there is still a considerable area of first-class lands waiting settlement.

The different mining camps now operating in the new districts are giving a ready market for all the grain and vegetables the farmers can produce.

The demand for new roads and more roads still continues.

Attached hereto are statements of expenditures for the year ending 31st October, 1916, in the various districts, and a summary of expenditure for the last five years.

I have the honour to be, Sir,

Your obedient servant,

J. F. WHITSON,

Commissioner.

STATEMENT OF EXPENDITURE UNDER NORTHERN & NORTHWESTERN ONTARIO DEVELOPMENT ACTS, 1912, 1915 AND 1916.

(From 23rd May, 1912 to 31st October, 1916.)

District.	Expenditure to 31st October, 1915.	Expenditure year ending 31st October, 1916.
District of Nipissing, North Bay to Mattawa, and east to Petawawa Military Camp, and south of Callander to South River, and west from North Bay through Sturgeon Falls	\$270,244 73	\$53,938 91
District of Temiskaming, Halleybury, Englehart, Matheson, Charlton, Swastika, Elk Lake, Larder Lake	395,871 16	92,116 78
District of Temiskaming, Cochrane, Porcupine, Iroquois Falls, and Transcontinental Railway from Quebec boundary west 125 miles to Groundhog	685,426 32	95,442 03
District of Sudbury, vicinity of the Town of Sudbury and Mining District surrounding	189,906 37	44,827 59
District of Algoma, vicinity of Hearst, along Transcontinental and Algoma Central Railways	84,314 32	18,041 31
District of Algoma, on Sudbury and Sault Ste. Marie Trunk Road	190,726 36	40,040 15
District of Thunder Bay, tributary to Port Arthur and Fort William	354,475 14	62,338 65
District of Kenora, vicinity of Kenora and Keewatin and Wabigoon	147,802 84	21,277 43
District of Rainy River, in Rainy River Valley	281,938 38	45,893 78
Algonquin Provincial Park		14,391 27
Manitoulin Island		9,269 30
Experimental Farm Plots	17,110 79	10,125 53

Seed Grain	98,920 26	24,916 63
General Administration Expenses	50,007 34	15,956 55
	\$2,766,744 01	\$548,575 91
Settlers' Loan Account		\$26,370 98
	\$2,766,744 01	\$574,946 89

ARTHUR E. D. BRUCE,
Secretary and Accountant.

STATEMENT OF EXPENDITURE, YEAR ENDING 31ST OCTOBER, 1916.

The Making of Roads:

Grigg, A., Deputy Minister, salary	\$75 63	
Whitson, J. F., Commissioner, salary	4,500 00	
Bruce, A. E. D., Secretary and Accountant, salary	2,791 00	
Beardall, F. G., Clerk (on active service) salary	1,605 18	
Dower, A. R., Clerk (on active service) salary	1,200 00	
Reid, A., Clerk (on active service) salary	916 33	
Extra Clerks	4,868 41	
		\$15,956 55
Wages	\$296,042 54	
Contracts	49,525 28	
Supplies and equipment	152,009 38	
		497,577 20

Advancement of Settlement and Colonization:

Wages	\$6,064 42	
Supplies, stock and equipment	4,061 11	
		10,125 53

Seed Grain:

Wages	666 32	
Seed grain, freight and expenses	24,250 31	24,916 63
		\$548,575 91

Settlers Loan Department:

Dane, F., Commissioner, salary	\$1,105 75	
Kennedy, W. K. P., Accountant, salary	552 88	
Crawford, G., Stenographer, salary	128 00	
Chester, Thos., Supervisor, salary	104 00	
		\$1,890 63
Net amount of loans issued	\$23,889 69	
Expenses	590 66	
		24,480 35
		\$26,370 98
		\$574,946 89

ARTHUR E. D. BRUCE,
Secretary and Accountant.

SUMMARY OF EXPENDITURE FOR THE FIVE YEARS ENDING 31ST OCTOBER, 1916.

Description.	Year ending 31st Oct., 1912.	Year ending 31st Oct., 1913.	Year ending 31st Oct., 1914.	Year ending 31st Oct., 1915.	Year ending 31st Oct., 1916.	Total Expenditure under each section.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Sec. 1 (a). Works and Improvements (Sewer at Hearst) .....	.....	.....	2,100 00	.....	.....	2,100 00
Sec. 1 (b). Roads ..	193,082 80	1,081,172 28	791,443 08	582,914 80	513,533 75	3,162,146 71
Sec. 1 (d). Farms .....	.....	.....	9,035 11	8,075 68	10,125 53	27,236 32
Seed Grain .....	.....	.....	.....	98,920 26	24,916 63	123,836 89
Clause 1-(Amending Act-1916) Settlers Loan Account	193,082 80	1,081,172 28	802,578 19	689,910 74	548,575 91	3,315,319 92
Total Expenditure under all sections ..	193,082 80	1,081,172 28	802,578 19	.....	26,370 98	26,370 98
				689,910 74	574,946 89	3,341,690 90

ARTHUR E. D. BRUCE,

Secretary and Accountant.

NORTHERN DEVELOPMENT BRANCH.

SEED GRAIN.

Summary of Seed Grain supplied to Settlers, Year ending the 31st October, 1916.

Distribution Store.	District.	Oats.	Potatoes.	Clover.	Timothy.	No. Settlers Supplied.
		Bush.	Bush.	Lbs.	Lbs.	
Kenora	Kenora.....	61 $\frac{1}{2}$	25	55		5
Dryden	"	814 $\frac{1}{2}$	950	750		90
Port Arthur.....	Thunder Bay.....	627	1,275	1,300		76
Emo.....	Rainy River.....	1,234 $\frac{1}{2}$	1,070	1,370		148
Sudbury.....	Sudbury.....	5,910	567	5,860	8,975	333
North Bay	Nipissing.....	23	10 $\frac{1}{2}$	40	50	4
New Liskeard.....	Temiskaming.....	216	130 $\frac{1}{2}$	615	445	37
Englehart.....	"	510	223 $\frac{1}{2}$	390	740	65
Matheson.....	"	1,020	651	1,595	1,945	147
Cochrane	"	1,164	778 $\frac{1}{2}$	1,635	3,140	192
		8,853	5,098 $\frac{1}{2}$	13,455 or 224 $\frac{15}{60}$ bush.	18,770 or 391 $\frac{2}{8}$ bush.	1,097

ARTHUR E. D. BRUCE,
Secretary and Accountant.

NORTHERN DEVELOPMENT BRANCH.

SEED GRAIN.

Amount refunded by Settlers for Seed Grain supplied.

October 31st, 1915, By notes retired and Cash paid.....	\$3,171 36
“ 31st, 1916, “ “ “	29,320 00
Total paid to Prov. Treasurer, Refund Account.....	\$32,491 36

ARTHUR E. D. BRUCE,
Secretary and Accountant.

RECORD OF CORRESPONDENCE.

For Year Ended 31st October, 1916.

Letters received	7,772
Letters and circulars mailed	16,349

ARTHUR E. D. BRUCE,
Secretary and Accountant.

DISTRICT OF KENORA.

New roads cut out and graded	21 miles
Old roads graded	11 miles
Old roads repaired	15 miles
Old roads gravelled	6 miles
Bridges constructed	23
Total number of miles under partial construction	53

In the District of Keewatin the work was continued throughout the season, beginning on the 1st of June to the last of October. The work was performed chiefly in the Agricultural sections north of Wabigoon and Dryden on the Canadian Pacific Railway, and extended northerly to the Grand Trunk Pacific Railway, in a section of the country which has been partially settled for several years, where the country is fairly good agricultural land—clay or clay loam. A few short roads were constructed or repaired north and north-west of Kenora in the sparsely settled townships.

In the District of Keewatin, as in other northern districts, the freshet and high water in April last damaged several of the old roads and bridges which had to be renewed or repaired. Labour was scarce and expensive, as well as provisions. Good results, however, were obtained by the money expended notwithstanding these difficulties. The work this season was done where it gave immediate results. Short roads were constructed or repaired in settlements where heretofore the school children had been unable to reach a school, and while there are still many instances where roads for schools are sadly in need, the greatest possible consideration has been given to such roads, considering the broken character of the country and the numerous small scattered settlements in the district.

ROADS IN THE DISTRICT OF RAINY RIVER.

Roads worked on 56 miles.

Number of miles of new road cut out only	3 $\frac{3}{4}$
Number of miles of new road grubbed only	$\frac{3}{4}$
Number of miles of new road cut, grubbed and graded	10
Number of miles of new road cut and grubbed	1 $\frac{3}{4}$
Number of miles of new road grubbed and graded	7 $\frac{1}{4}$
Number of miles of corduroy laid	1 $\frac{1}{4}$
Number of miles of new road graded only	1 $\frac{1}{4}$
Number of miles of old road regraded	13 $\frac{3}{4}$
Number of miles of old road gravelled	20 $\frac{1}{2}$
Number of miles of tap drain put in	1 $\frac{1}{2}$
Number of bridges constructed	8
Number of culverts built	22
Number of miles of road dragged	75

The main roads worked on were, first, a road from the Town of Rainy River north to the Lake of the Woods. The road is now in such shape as to allow the settlers to drive to the Town of Rainy River during the summer months. Previous to this road being completed the settlers in the Township of Spohn were required to secure supplies in the summer season by boat and pack them to their homesteads. The land along this road through the Wild Lands Reserve has all recently been sold by the Department of Indian Affairs. The influx of settlers on these lands will greatly benefit the Town of Rainy River.

The gravelling of the trunk road from Rainy River Town to Fort Frances has been completed and where required, regravelled, giving the settlers 62 miles of continuous good gravelled road.

The main road north of Barwick has been gravelled this season a distance of 6 miles. The settlers now have 11 miles of gravelled road north of the Canadian Northern Railway.

North of Emo, 4 miles of the Carpenter and Dobie townline was gravelled. This is the main road leading north of Emo and it is desirable that the gravelling be continued on it further north through the settlement.

The old Colonization road between Little Forks and Fort Frances was graded for a distance of 7 miles and tap drains were dug where required; also, a mile and a half of this road was gravelled through the Indian Reserve. The remainder of this road requires gravelling as the traffic is very heavy.

The other roads worked on were short roads needed badly by the settlers.

The distribution of seed potatoes and grass seeds gave good results, as both the hay and potato crops throughout the district gave a good yield. The wheat and oat crop was very light.

ROADS IN THE DISTRICTS OF PORT ARTHUR AND FORT WILLIAM.

Number of miles of new road cut out and graded	27
Number of miles of old road regraded	14
Number of miles of old and new roads gravelled	17
Number of culverts constructed	215
Number of bridges constructed	5

Township of MacGregor:

North-east Branch Road—

This road was regraded and gravelled for $11\frac{1}{2}$ miles and was continued through Lot 16, Concessions 2 and 3, a distance of $1\frac{1}{4}$ miles. The road was grubbed out, ditched, one-quarter mile stone and corduroy foundation laid, 32 culverts set, one bridge, on rock-filled cribs, of 22 foot span and with two approaches of 25 feet each, was erected over the Current River; the whole was graded and gravelled. This road is completed as far as present settlement warrants.

Township of Gorham:

Road between Lots 10 and 11:

This road was continued through Concessions 2, 3 and part of 4 to the valley of the Current River near Hazelwood Lake, a distance of $11\frac{1}{2}$ miles. The road was cleared, grubbed, ditched, $\frac{1}{2}$ mile stone and corduroy foundation laid, 14 culverts set, and the whole was graded and gravelled. This road is now completed through the very rough ground that isolated the settlers in the Current River Valley and also affords access to Hazelwood Lake, a source of water supply of the City of Port Arthur.



A view along the Port Arthur, Fort William and Duluth Highway.

*Townships of Gorham and Ware:**Town Line—*

This road was continued through Concessions 5 and 6 to the area of level lands surrounding Trout Lake, a distance of 2 miles. The road was cleared, grubbed, ditched, $\frac{3}{4}$ of a mile of corduroy foundation laid, 7 culverts set, 1 bridge erected; the whole was graded and $1\frac{1}{2}$ miles were gravelled. The road is now completed as far as settlement warrants.

*Township of Ware:**Road between Lots 10 and 11—*

One mile of this road regraded and the road was continued 3 miles through Concessions 2, 3 and 4, and a branch road built between Concessions 3 and 4 to connect with roads west of Strawberry Creek and afford settlers there access to the Dawson Road. This road was cleared, grubbed, ditched, $\frac{1}{2}$ mile of corduroy foundation laid, 27 culverts set, the whole graded and $\frac{1}{4}$ mile of low-lying ground was gravelled. This road is completed as far as present settlement warrants.

*Township of Paipoonge:**Arthur Street Road—*

This road was gravelled and rolled by steam roller through Lots 1 to 10, and through Lots 14 to 24, in all a distance of $5\frac{1}{4}$ miles. This work was done early in the season; the increase in traffic induced has proved heavy for the sandy soiled roadbed through Lots 24 and 34 and this still requires re-surfacing with gravel.

*Township of Conmee:**Blind Line Road, Concession 1—*

This road commences at the bridge erected by this Branch across the Kam-inistiquia River at Kakabeka Falls, and runs north along the river bank to the "blind line" in Concession 1, thence west along that line. One and one-half miles of new road was cut out, grubbed, ditched and graded, 6 culverts set and $1\frac{1}{4}$ miles were gravelled. The road is completed to Lot 4, and requires to be continued to Lot 7, a distance of 2 miles.

*Township of O'Connor:**Road between Concessions 6 and 7—*

This road also commences at the above-mentioned bridge and runs west; and is completed as far as Lot 7. Two and one-quarter miles of this was grubbed, ditched and graded, 10 culverts were set and 1 bridge on piles erected. The road requires to be continued for 2 miles to accommodate settlers now there.

*Township of Lybster:**Silver Mountain Road—*

This road runs through Lots 5 to 10, in Concessions 4 and 5. Two and one-half miles of this road was regraded and the road continued, cleared, grubbed and ditched for $1\frac{1}{2}$ miles further, 13 culverts set and $\frac{1}{4}$ mile of corduroy foundation laid. The road requires to be continued to Silver Mountain Station on the C. N. Ry., a further distance of about a mile.

*Township of Pearson:**Road between Lots 20 and 21—*

This road commences at the north limit of the township at the line between Lots 18 and 19, and runs south-westerly to the west limit of Lot 20, and then south



Graves Mountain, one of the many beautiful mountains on the Port Arthur, Fort William and Duluth Highway, Ontario; approximately about 800 feet above Lake Superior.

along that limit. Two and one-half miles of this road was grubbed, ditched and graded, $\frac{1}{2}$ mile of corduroy foundation laid, 11 culverts set.

Tip Top Mine Road:

This road commences about $2\frac{1}{2}$ miles west of Kashaboie Station on the C. N. Ry. (80 miles west of Port Arthur), and runs south-westerly $6\frac{1}{2}$ miles to the Tip Top Copper Mine. A roadway had previously been partially constructed from the mine towards the railway.

A road was cut out commencing at the railway, thoroughly ditched and a corduroy foundation laid for 3 miles; this has since been continued by the Mining

Company and completed to the already constructed portion. The whole has been covered with earth and gravel by the Company, and a tramway laid from the railroad to the mine to enable the Company to ship their ore to the C. N. Ry.

Township of Blake, Crooks and Pardee:

Port Arthur and Duluth Highway—

Nine miles of this road was regraded, ditches deepened, slide banks removed, 4 culverts were set and 2 small bridges erected. The road was continued a distance of 7 miles to the Pigeon River (The International Boundary); it was cleared, grubbed, ditched, 91 culverts set, 2 miles stone and corduroy foundation laid; the whole was graded and 5 miles of gravelling was done.

It is 44 miles from Fort William to the Pigeon River by this road.

This road affords access to a large area of good lands in Pardee Township lying to the west of the Stuart Mining Location, which has been isolated because of the absence of a road through the latter. The valley of the Arrow River (still in the Crown) is also served by this road; this is also a large and promising section.

The Minnesota State Highway Commission has completed a road to connect with this road at the Pigeon River from Duluth, distant 157 miles, and as soon as an International bridge is erected, there is every reason to believe that there will be a large traffic, more particularly tourist traffic, as the road passes through Grand Marais one of the most attractive summer resorts on Lake Superior. There is also a large area of good agricultural lands already settled south of and adjacent to the boundary. The timber being cut in this section on both sides of the boundary is manufactured at Port Arthur.

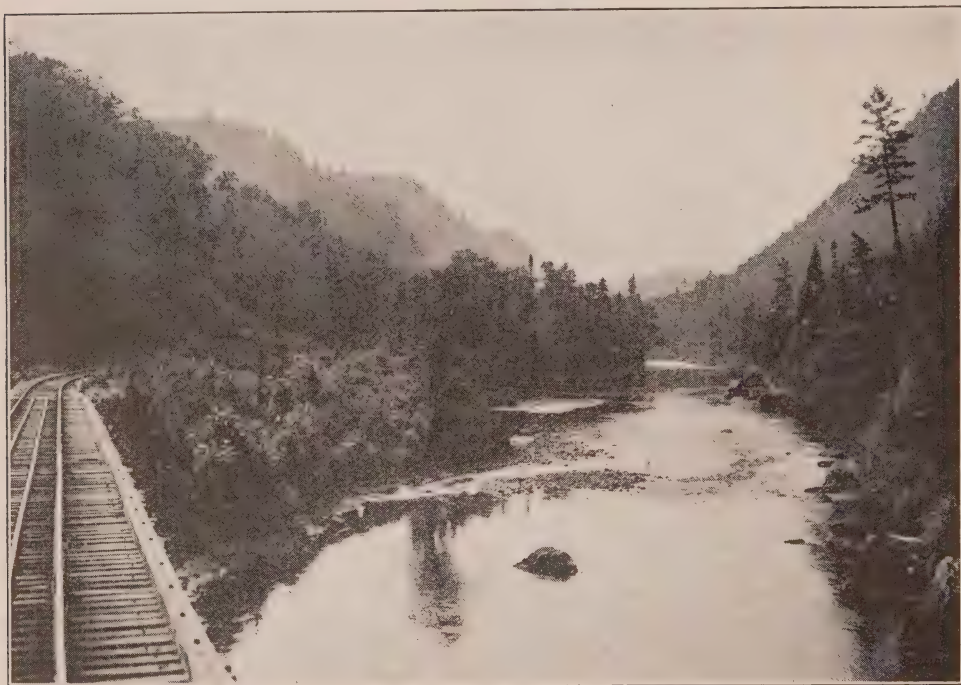
SAULT STE. MARIE, SUDBURY, AND GOULAIS BAY TRUNK ROADS.

New roads cut out and graded	3 miles
New and old roads re-graded and surfaced with gravel	16 miles
Old roads re-surfaced with stone	5 miles
Old roads re-graded	15 miles
Old roads repaired	6 miles
Total miles under construction and repair	45

The spring freshets commencing about the 20th of April last and the heavy rains early in September did great damage to the roads in the Algoma and Sault Ste. Marie districts, washing out culverts and bridges, and in other ways damaging the roads. These damaged roads had to be repaired at considerable cost. Only a few miles of new road were constructed.

Goulais Bay Road or that locally known as the People's Road, near the Town of Sault Ste. Marie, was partly re-constructed. The old road was found to be almost impassable in places and owing to the heavy grades several long diversions around bad hills had to be made in ascending the mountain to the Goulais Bay Valley, where there is a considerable settlement. In places the old road was very stony and rocky, also narrow and undrained. The road has not yet been completed; owing to the wet weather in October it was found impossible to finish the work on all the diversions. Difficulty in getting labour also retarded progress. The road, as now located, when finished, will make a fairly good road, and will give to a great number of settlers an opportunity of marketing farm produce at all seasons of the year, as well as their timber.

The work done on the main trunk road from Sault Ste. Marie to Sudbury consisted chiefly in re-surfacing parts with gravel and stone, repairing sections damaged by the spring freshets and heavy rains of September, and in placing permanent culverts. This road is now almost finished, with the exception of the gravelling of a few miles between Dean Lake bridge and Missisaugi which was left because of the impossibility of obtaining gravel during the summer; the gravel being on the opposite side of the Missisaugi River, and can only be hauled during the winter season. There are also 2 bridges, one west of Blind River and the other across Ladouceurs Creek, to be re-constructed.



A view on the Algoma Central Railway, along Magpie River, between town of Sault Ste. Marie, Ont., and Hearst.

SUDBURY DISTRICT.

Number of miles of road gravelled	7
Number of miles of new road cut out	6
Number of miles of new road graded	1
Number of miles of road repaired in places	40

The Dill Township road was graded for a distance of one mile.

The road from Sudbury to Long Lake in the Townships of McKim and Broder was re-graded for a distance of $3\frac{1}{2}$ miles.

The Sudbury and Murray Mine stone road was repaired and re-graded in places for a distance of 4 miles.

The Blezard Valley trunk road from Scoble Crossing north through the Township of McKim and Blezard for a distance of 1 mile was repaired.

The Levack Township mining road was re-constructed and repaired for a

distance of $3\frac{1}{2}$ miles. This road was originally constructed a year ago and was destroyed by the spring freshet, caused by the breaking of the dam at the foot of Onaping Lake. The old bridge across the Onaping River was carried away with the flood and is now being renewed.

The Shining Tree mining road, which was built two years ago by this Department, was partially destroyed by fire a year ago. The same was repaired, and 6 miles of new winter road cut out from the end of the old road cut two years ago north-easterly to the mines at Wasabika Lake. The road begins at Kashbaw Station on the Canadian Northern Railway, and runs in a north-easterly direction for 24 miles. The first 18 miles was constructed two years ago and was repaired, and a winter road only cut out for the balance of the distance.

SUDBURY AND NORTH BAY TRUNK ROAD.

Number of miles of road under construction	29 $\frac{1}{2}$
Number of miles of new road constructed	15
Number of miles of new road cut out and graded	6
Number of miles of road macadamized	8 $\frac{1}{2}$
Number of culverts built	60
Number of small bridges under construction	2

Five years ago a trunk road was constructed between Sudbury and the Village of Coniston, near the Mond Nickel Company's nickel and copper smelters and mines. The original road was well graded and drained, and, although well constructed, was chiefly of clay or light loam, and owing to the heavy traffic between Sudbury and the Village of Coniston, did not withstand the heavy traffic. During the wet weather it rutted to such an extent that in places it was almost impassable and it was necessary to re-surface it with rock. Early in May the stone crusher was set at work and operations were carried on during the entire season. The road is now completed, the distance being $8\frac{1}{2}$ miles. It was first re-graded, a few additional culverts placed, and 10,855 cubic yards of rock was crushed and put in place. The traction engine and large rock wagons were used in hauling the road material. The road was well rolled with a ten ton roller during construction and is now in first-class condition. The width of the rock surface is 9 feet.

The continuation of this trunk road east of Coniston to Wahnapiatae, a distance of 4 miles, as constructed a year ago by this Department, was re-surfaced with gravel as far as Wahnapiatae Station.

Early in June work was commenced on the continuation of the Sudbury and North Bay trunk road from Wahnapiatae easterly to a point on the Canadian Pacific Railway 3 miles west of the Village of Warren, a distance of 21 miles, where work terminated in 1915 on the construction of the same road from North Bay west; the distance covered this season being $29\frac{1}{2}$ miles. The first 6 miles east of Wahnapiatae was cut out, grubbed and graded; the next 6 miles to the Village of Markstay was cut and grubbed only. There is now a good winter road from Sudbury to Markstay. Heretofore the settlers from Markstay were unable to reach a market either to the east or west. From Markstay easterly the road followed the old Colonization road for about $2\frac{1}{2}$ miles north of the right-of-way of the Canadian Pacific Railway. The road then turned to the south, crossing the right-of-way, and was extended in a general direction parallel to the right-of-way to the end of the road as constructed a year ago 3 miles west of Warren. The road from Markstay to Warren has all been

graded, but in places requires surfacing with gravel. There is now a well graded road from Markstay to North Bay, 55 miles, which requires, however, surfacing with gravel in a few places west of Warren; there is now a winter road from North Bay to Sudbury, 80 miles, 6 miles of which still remains ungraded with 2 small bridges to be renewed.

The road between Warren and North Bay, which was finished a year ago, was improved by running a small grader over it in places where it had become slightly rutted. When the 6 miles of this road which is now ready for grading is finished, the settlers between North Bay and Sudbury will be able to market their produce either at Sudbury or North Bay, thus fulfilling a long felt want. Many of these settlers have been in occupation on their lots for nearly thirty years without being able to reach a market, more particularly those east and west of Markstay.

ROADS IN THE VICINITY OF NORTH BAY.

Township of Chisholm:

The Township of Chisholm Trunk Road commenced in 1915 was continued along Lots 5 and 6 of the said road a distance of $3\frac{1}{4}$ miles. The road was cut out and graded and the surface was gravelled.

Township of Widdifield:

The road in front of Lot 16, Con. 2, Township of Widdifield, was surfaced with gravel for a distance of $\frac{1}{2}$ mile.

NORTH BAY, CALLANDER AND POWASSAN TRUNK ROAD.

Total number of miles reconstructed, graded and surfaced
with gravel in places 24 miles

From the Village of Powassan, which is about 20 miles south of North Bay, work was begun on the North Bay, Callander and Powassan Trunk Road last May and continued up to the last of October when operations ceased at the Village of South River $20\frac{3}{4}$ miles south of Powassan. Between these two villages there was an old road built at different periods. There was very little through traffic over the road, it being almost impassable in places owing to bad grades, stony hills, and swamps. During the wet season traffic was completely stopped between South River and Trout Creek, the distance between these two villages being $8\frac{1}{4}$ miles. In order to improve the grades several deviations had to be made from the old road to avoid almost impossible hills on the 11th and 12 Concessions of the Township of Laurier. At this point about 2 miles of new road had to be cut out. The road as now constructed has very few heavy grades and from North Bay to South River there is a first-class road considering the character of the country it passes through. There are, however, a few places which still require gravelling and regrading later on. After the road leaves Powassan, in the Township of Himsworth, it runs in a south-westerly direction passing through the Village of Trout Creek, near the north limit of the Township of Laurier and extends in a south-westerly direction through

the last named township and the Township of Machar, a distance of $20\frac{3}{4}$ miles. The country passed through is generally rough and rocky in places, although there is a fair percentage of good agricultural land. The farmers in many instances have good buildings and land in a fair state of cultivation. Large sections of country are still covered with timber, chiefly hardwood.

The distance from South River to North Bay is a little over 40 miles and can be covered by an automobile in two hours. The road constructed this season will still require to be re-surfaced in a few places. The road will give the settlers what they have long required, access to the leading local markets, North Bay, Callander and Powassan, at all seasons of the year.

This Trunk Road when improved as far as Burk's Falls, a further distance of 20 miles, would constitute an excellent highway between North Bay and Bracebridge.

NORTH BAY AND MATTAWA TRUNK ROAD.

Twenty miles repaired.

The Trunk Road between Callander and Mattawa was constructed three years ago, was re-surfaced with gravel in places for 7 miles, and run over with the road drag for 20 miles in the Townships of Ferris, Bonfield, and Calvin.

PEMBROKE AND MATTAWA TRUNK ROAD.

During the winter of 1915-16, after finishing the surfacing and gravelling of the trunk road between the Military Camps at Petawawa and the Town of Pembroke, work was commenced in November, 1915, and continued throughout the winter season, in filling the eastern approach to the new bridge across the Petawawa River at the eastern entrance to the Petawawa Military Camps. Approximately 15,000 cubic yards of gravel and stone were required in this work. The road from the Military Camps to Pembroke is now in first-class condition.

ROADS IN THE ALGONQUIN PROVINCIAL PARK, DISTRICT OF NIPISSING.

Minesing Road, partly cut out, ditched and graded	10 miles
Nominigan Road, partly cut out, ditched and graded	7 miles

From Algonquin Park Station, on the Canada Atlantic Branch of the Grand Trunk Railway, in the Algonquin Provincial Park, two roads as above named were partly constructed and improved. Both start from the railway station near the headquarters of the Park Ranger and the Highland Inn, one of the railway company's beautiful summer resorts.

The Minesing Road winds its way over the hardwood ridges and through the valleys in a northerly direction for a distance of over 11 miles to the south-west shore of Island Lake, where the railway company has erected several fine summer resorts. The lake is one of the finest in the Park and is situated at the head waters of three important rivers, the Muskoka, Madawaska and Petawawa, at an elevation

of 1,600 feet above sea level. On this road 30 culverts were built, and two small bridges, with 44 and 40 feet span, constructed across Beaver and Polly Creeks.

Nominigan Road starts from the same station branching off the Minesing Road about a mile from the railway station and runs in a north-westerly direction to the outlet of Source Lake, where it crosses the Grand Trunk Railway to the south side, and then runs in a westerly direction to the east shore of Smoke Lake, near the source of the Muskoka River, where the Grand Trunk Railway Company has constructed and is operating several beautiful summer resorts. The distance from the railway station to the Nominigan Camps by the road is about 8 miles, on which 25 culverts and one bridge, 38 feet in length, were constructed.

The country passed through by these roads is rolling and rocky, mountainous in



Grand Trunk summer resorts. The end of the Minesing Road,
Algonquin Provincial Park.

places. From an agricultural point of view it has little or no value. The soil, where there is any, is light sandy loam with small areas of clay soil in the swamps and sand on the ridges. Unfortunately no gravel suitable for road purposes was to be found along the road, the only road material being a light loam and rock.

The land is well timbered with large birch, maple, ironwood and hemlock, with here and there, along the shores of the numerous lakes, groves of small pine, and on the high lands an occasional large white pine, the remains of the original pine forest which has been cut off.

A narrow wagon road had originally been cut out by the railway company. It was widened to a width of from 24 to 30 feet, graded with the best material available and well ditched, and is at present suitable for the traffic.



A field of wheat (first crop), on the Stewart Farm, near Earlton, on the Temiskaming & Northern Ontario Railway.



Sheep farming, west of Englehart, in the District of Temiskaming.



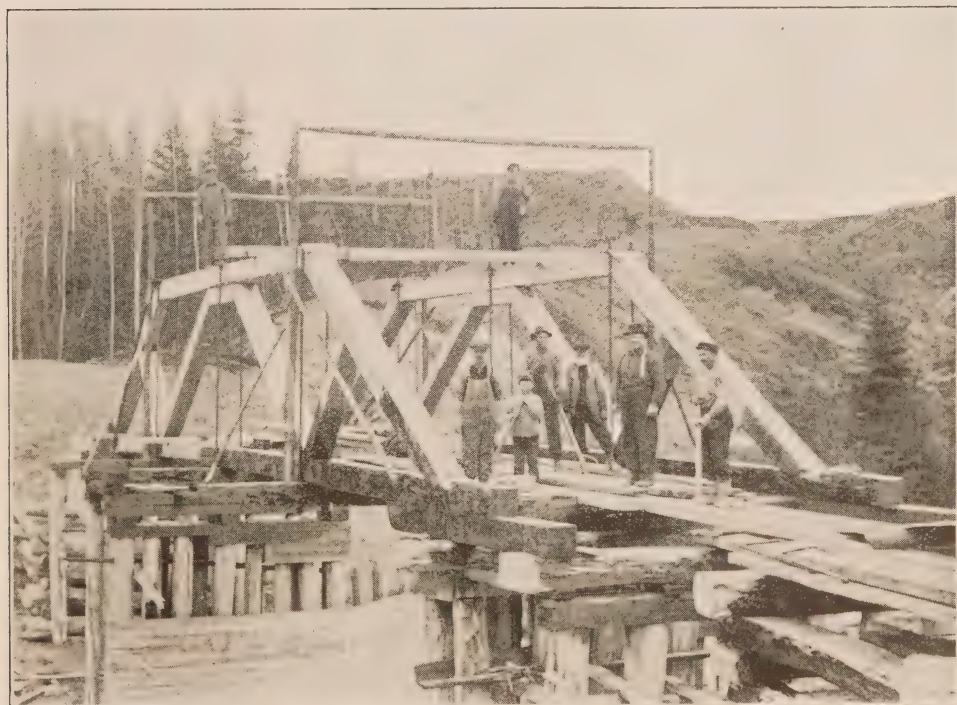
A field of barley in the Township of Dack, Temiskaming & Northern Ontario Railway.



A settler's home in Marter Township, Temiskaming & Northern Ontario Railway, showing field of barley.



A settler's first team, Township of Evanturel, near Englehart, Temiskaming & Northern Ontario Railway.



Constructing a bridge across the Blanche River, near Englehart, Temiskaming & Northern Ontario Railway.

ROADS IN THE VICINITY OF ENGLEHART, TOMSTOWN, BRENTHA, LONG LAKE, AND CHARLTON.

Number of miles newly graded road with new culverts	26
Number of miles road, regraded with repaired culverts	59
Number of miles road cut and burnt only	9
Number of miles road stumped ready for grader	5
Number of bridges built	6

In the section north and south of Englehart, along the T. & N. O. Rly., south-east to Tomstown, west to Charlton, and along the north-east shore of Long Lake, and south-west of Brentha, considerable damage was done to the roads, culverts, and bridges by the early spring floods. An unusual depth of snow fell during the winter of 1915-16—in places from four to five feet in depth, followed by heavy spring rains and a sudden thaw about the middle of April. The water rose in the Blanche River nearly 20 feet in five days. Many of the old bridges and culverts, as well as a few of the new ones, were washed out. Ditches and roads were destroyed which had all to be renewed at considerable cost. Labour was difficult to procure and expensive.

Fairly good results, however, were obtained for the money expended. Crops throughout this district were fine, especially hay and clover. Grain crops would have yielded well had it not been for the extremely dry weather during the latter part of July and the first two weeks in August, which caused the grain to ripen too rapidly.

Great progress is being made by the settlers in this district, both in clearing land and in erecting good buildings. Little damage was done in this section by forest fires last season, although considerable small areas were burnt over.

ROADS AND BRIDGES CONSTRUCTED AND REPAIRED IN THE VICINITY OF MATHESON, AND THE MINING DISTRICT OF KIRKLAND LAKE, MUNRO AND LARDER LAKE, DISTRICT OF TEMISKAMING.

Number of miles of road repaired	47
Number of miles of new road cut	2½
Number of miles of road gravelled	6
Number of miles of road re-surfaced with stone	3
Number of miles of road graded	10
Number of bridges constructed	5
Number of bridges repaired	8

During the winter of 1915-16 work was continued on the eastern part of the trunk road from the Town of Matheson to the gold mines in Township of Munro; 5 miles of the road graded the previous season was surfaced with gravel, part along the south boundaries of the Townships of Beatty and Munro.

During the summer season work was performed in the Townships of Hislop, Beatty, Bowman, Carr, Currie, Taylor, Walker, Clergue, Stock and Bond. Also, the trunk road from Swastika to the Kirkland Lake mining district was re-surfaced with rock for a distance of 3 miles. The old road from Dane Station, on the Temiskaming and Northern Ontario Railway, to the mines operating in the vicinity of Larder Lake, a distance of 18 miles, was repaired in places and several old bridges and culverts renewed. The work in the above-mentioned townships consisted chiefly in grading, re-grading and in other ways improving old roads cut out during



A typical settler's home in the Township of Evanturel, Temiskaming & Northern Ontario Railway.



Harvesting rye along the Temiskaming & Northern Ontario Railway.

the last five years. Owing to the spring freshets and the forest fires, which swept over the greater portion of the townships in the neighbourhood of Matheson during the latter part of July and the fore part of August, most of the culverts, small bridges and a couple of large bridges were destroyed by fire, and much of the corduroy roads burned over. Immediately after the fire, work was begun in repairing the damage done. This occupied nearly all the time from August to the end of the season and cost considerable. Most of the timber suitable for culverts was burned and permanent corrugated iron culverts had to be procured; 140 of these were secured and the greater number of them have been placed. A few of the smaller bridges have been re-constructed and work is now under way constructing two of the larger bridges burned out.

The heavy freshets during the month of April, as in other sections of the district, did great injury to many of the clay roads, which had to be re-graded. Labour was hard to procure and expensive. Several of the proposed new roads had to be abandoned. The results obtained in this district, owing to the great losses by fire, in the construction of new roads this season have not been entirely what was hoped for or expected.

The warehouses, office and stables at Matheson were completely destroyed, along with considerable camp equipage and supplies. These, however, were partially covered by insurance. They have since been re-constructed.

Fifty acres of land on the north part of Lot 4, Concession 6, Bowman Township, was cleared, stumped, fenced and plowed and about 30 acres of it put under cultivation as an Experimental Farm. The results were very satisfactory.

PORCUPINE MINING SECTION.

Total number of miles of road under construction	18	miles
New roads constructed and graded	5½	miles
Old roads graded	7¼	miles
Roads re-surfaced with stone	5¼	miles

The Trunk Road between Golden City and Mattagami River, which passes through South Porcupine and Timmins, over which there is a great deal of heavy traffic between the mines, was re-surfaced with rock for 2½ miles and with gravel for 1½ miles.

A new road starting from the Trunk Road at the Mattagami River was cut out and graded north along the easterly bank of the river to Concession 2, Township of Mountjoy for 1½ miles, to accommodate the farmers along the river.

The road between the Townships of Tisdale and Mountjoy, and between the Townships of Delora and Ogden from the Town of Timmins to the Hayden Mine, 3¾ miles was widened, grubbed and graded. One bridge, 26 foot span, was re-constructed and part of the road surfaced with gravel.

A road from the T. & N. O. Rly. crossing at the Town of Timmins to the Vipond Mine was grubbed, graded and surfaced with crushed rock from the mines for a distance of 1 mile.

A road from South Porcupine to the Crown Chartered Mine and other mines along the boundary between Tisdale and Whitney, was repaired and graded for a distance of 3 miles.

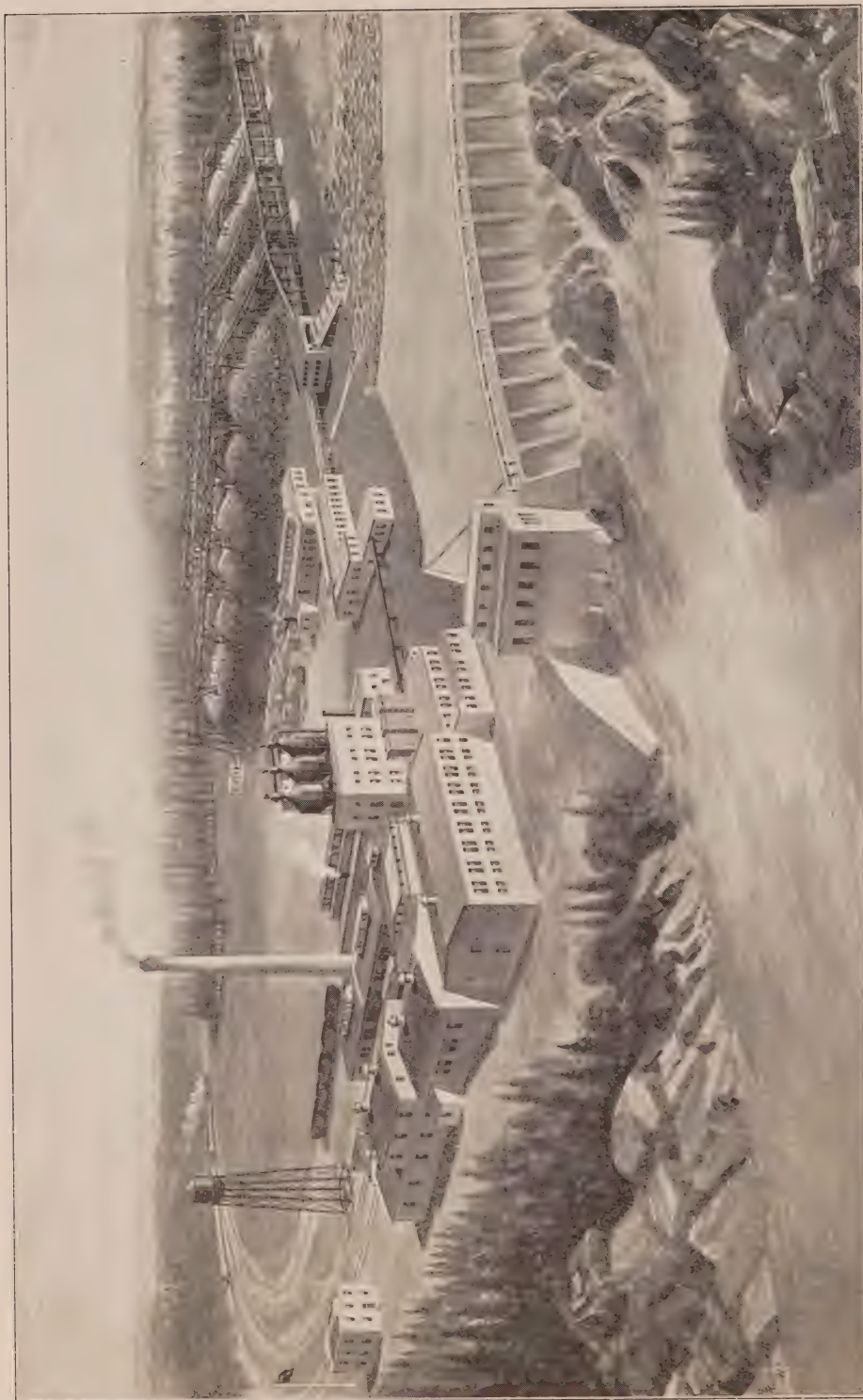
A branch road from the Trunk Road, between Golden City and South Porcu-



Trunk road, Timmins to South Porcupine, re-surfaced with rock this season (1916).



Road from the Hayden Mine to the town of Timmins, under construction 1916.



Plan of the Mattagami Pulp & Paper Co., Ltd., proposed pulp and paper mills now under construction at Smooth Rock Falls, on the Mattagami River, 20 miles west of the Town of Cochrane, Transcontinental Railway. Capacity of first unit, 150 tons sulphite fibre; hydraulic development at 45-foot head, 9,000 h.p. A spur line has been constructed from the Transcontinental Railway, north $3\frac{1}{2}$ miles to the mills.

pine to Dead Man's Point on Porcupine Lake near the public cemetery, was graded for $\frac{1}{2}$ mile and gravelled $\frac{1}{4}$ mile.

The road from Golden City to Pottsville, which had been damaged by the spring freshet, was re-surfaced with rock for $\frac{1}{4}$ mile.

The road cut out last season in the Township of Mountjoy, west of the Mattagami River, was graded, commencing on the west side opposite the main Trunk Road, through Mattagami Heights running in a north-westerly direction across Lots 1 and 2 to the 3rd Concession line, thence west along said concession line for a distance of 2 miles, a distance of $3\frac{1}{4}$ miles in all. Six culverts were placed and one bridge 52 feet long was constructed.

WORK DONE IN THE DISTRICT OF COCHRANE, ALONG THE LINE OF THE TEMISKAMING AND NORTHERN ONTARIO RAILWAY SOUTH TO PORQUIS JUNCTION, WEST ALONG THE PORCUPINE BRANCH OF THE TEMISKAMING AND NORTHERN ONTARIO RAILWAY, EAST ALONG THE BRANCH TO THE ABITIBI RIVER, AND ALONG THE TRANSCONTINENTAL RAILWAY EAST TO THE ABITIBI RIVER AND WEST TO THE TOWN OF HEARST.

Total number of miles of roads, old and new, under construction.....	129
Number of miles of roads under construction and repaired.....	57
Number of miles of new roads cut out	10
Number of miles of old roads burned	$7\frac{1}{2}$
Number of miles of roads stumped ready for grading	$21\frac{1}{2}$
Number of miles of roads ditched	18
Number of miles of roads, old and new, graded	15
Number of bridges built	15
Number of culverts built and renewed	146

The work performed in the Cochrane District consisted chiefly in completing roads which had been cut out in previous years; the work extended over 129 miles, of which 10 miles of new road was cut out this season. The early spring floods and the fires of July and August did great damage to the roads in this district. Several of the old bridges and culverts were washed out, including part of the new bridge and dam at Connaught on the Frederickhouse River. More than 100 culverts were destroyed in the recent fire and several small bridges, also many miles of corduroy roads. On the most important roads the culverts and bridges have been renewed, and where the corduroy was burnt out it has been removed and the roads re-graded. Good results were obtained for the money spent, although labour was hard to procure and expensive.

The fire of July 29th destroyed the two store-houses at Cochrane, in which there was considerable road plant and provisions. The buildings were insured and the loss was not very great. The warehouses were rebuilt.

A ferry was constructed across the Mattagami River west of the Town of Timmins. Several short roads were constructed in different parts to enable the school children to reach the nearest schools. Where the corduroy was burnt out on the old roads ditches had to be enlarged. Fifteen new wooden bridges were constructed and 146 culverts, of which 40 were of corrugated iron.

Splendid results have been obtained from the experimental gardens and farm

plots at Cochrane, Ground Hog, Kapuskasing, Hearst and Nagagami, 40 miles west of Hearst. Very good progress is being made along the Grand Trunk Pacific Railway and along the Temiskaming and Northern Ontario Railway and its branches, in clearing up land by the settlers. The crops throughout the district were in most places very good, more especially timothy, clover, fall wheat, also vegetables and root crops. Crops planted in reasonable time did not suffer from summer frosts. The late crops, owing to the extremely hot weather in the latter part of July and fore part of August, ripened too quickly and did not yield as well as was expected. Potatoes and all kinds of vegetables yielded well. Great improvement has been noticed in the climatic conditions where large areas of land have been cleared or burnt off.



The Hon. G. H. Ferguson, Minister of Lands, Forests and Mines, on a visit to the Mattagami Pulp and Paper Mills, Mattagami River, Transcontinental Railway.

KAPUSKASING, INTERNED ALIENS CAMP, TRANSCONTINENTAL RAILWAY, SEVENTY MILES WEST OF COCHRANE, DISTRICT OF TIMISKAMING.

During the winter of 1915-1916 work was continued along the right-of-way of the Grand Trunk Pacific Railway east and west of the Kapuskasing River where is situated the Interned Aliens Camp and the Experimental Farm of the Department of Agriculture at Ottawa. The work consisted in the cutting and burning of all the timber on both sides of the right-of-way for a depth of 10 chains, or approximately 25 acres on each lot. The report of 1915 gives a detailed description of what had actually been done at the end of October 31st, 1915. Since that date 600 acres have been cut out and burnt over. About 5 acres on the east side of the Kapuskasing River was ploughed and put under crop. The land was burnt over

and ploughed early in May and sown about the latter part of May. The crops sown about the first of June did not mature as they were caught by the frosts in September. Potatoes and vegetables, however, that were planted early in the season gave a first-class yield. On the east side of the river where the crops were sown early, splendid results were obtained. The soil in this section of the country is a rich clay and clay loam. In the immediate vicinity of the Dominion Experimental Farm there is approximately 1,000 acres clear and burnt over, and along the right-of-way east and west of the river there is an additional 600 acres of lands of the Crown. This land was well burnt during the dry season; great care was



A typical view on the banks of the Kapuskasing River, Transcontinental Railway.

taken and no damage was done to timber outside the limits of the cleared area. About the middle of May the interned aliens refused to work and after that date no further work was done in clearing land. A small sawmill was erected on the Kapuskasing River and the merchantable timber taken out during the process of clearing was sawed into lumber. Part of the foundation for a bridge across the river was constructed. The Agricultural Department at Ottawa have now large farm buildings constructed and a large area of land ploughed ready for a crop. This section of the country has now every appearance of becoming one of the best agricultural sections along the Transcontinental Railway in the Clay Belt.

ROADS ON MANITOULIN ISLAND.

GRADING AND REPAIRING, 1916.

Number of miles of road graded and surfaced with gravel, 8½.

One bridge constructed.

Eight stone and 24 corrugated iron culverts placed.

The main trunk road on Manitoulin Island is constructed between Little Current and Gore Bay, the distance being about 40 miles. The easterly portion of this road from Little Current westerly for 10 miles is in very fair condition, most of it having been surfaced with gravel and well graded and ditched, although in a few places the road had been constructed too narrow.

Operations were commenced early in May about 12 miles west of Little Current and continued the work westerly for a distance of over 7½ miles to West Bay, and from that point south towards Mindemoya, a further distance of 1½ miles. The road, previous to my starting work, had in places been constructed too narrow; it was badly drained and in places had not been graded. The road was widened well ditched and surfaced with gravel. Part of the road from West Bay south to Mindemoya was only a mere trail and had to be cut out. There is now a first-class gravel road between Mindemoya, West Bay and Little Current, the distance being approximately 20 miles. There is a great deal of traffic over this road, it being the main trunk road on the Island. The continuation of this trunk road west of West Bay to Gore Bay requires to be re-graded and re-surfaced in places, and continued southerly along the east shore of Mindemoya Lake, the Mindemoya Road being the main trunk road running north and south across the Island. These roads pass through a fairly good agricultural country in a good state of cultivation. The country, although rocky and swampy in places, is well adapted for agriculture. Part of the road was difficult to improve owing to the narrow road as originally constructed and the number of small surface boulders met with. Good gravel, however, was plentiful and no difficulty was met with in making a good permanent road. Where drainage was required corrugated iron or stone culverts were placed where no timber was available.

EXPERIMENTAL FARM AND GARDEN PLOTS.

Matheson Experimental Farm Plot:

This farm is situated near Matheson on the north half of Lot 4, Concession 6, Township of Bowman, along the line of the Temiskaming and Northern Ontario Railway. Fifty acres of this lot was cleared early last spring and about 30 acres put under crop. All kinds of grain, as well as different kinds of vegetables, were tested with good results. The land had been burned over several years ago and was easily cleared. The greater portion of it is high and rolling; part, however, is low and covered with considerable black loam. The land was plowed as soon as the snow disappeared, and planted between the 10th and 24th of May. The fires of July and August which swept over the Matheson district did considerable damage to the crops. Except, however, where damage by the fire had been done, the crops were of first-class quality and matured without injury by summer frosts. Different varieties of spring wheat were sown, the Marquis, however, gave the best results.

Different varieties of peas were also sown and all matured. The barley, oats and flax were likewise a good crop and would have given a heavy yield had it not been for the extremely hot dry weather during the latter part of July and the first two weeks in August. The grain ripened very fast and was not as well filled as was expected. About 40 acres of land was plowed last fall and 8 acres of it sown in fall wheat.

Cochrane Garden:

The garden plot at the headquarters at Cochrane and the farm about one mile west of Cochrane were planted as in previous years and gave excellent results. Strawberries, early corn, beans, celery, potatoes, turnips, etc., yielded well, also all kinds of grain. Fall wheat gave 43 bus. per acre; spring wheat 30 bus. per acre.



Flower and vegetable garden at headquarters of Northern Development Branch, Cochrane.

Three varieties of spring wheat were sown on the 27th of April on fall plowed land and were harvested on 12th of August. Barley gave a good yield. Different varieties of oats were sown; the Siberian and Banner oats appeared to give the best results.

As this land is high and had been cultivated for two previous seasons no injury was done by summer frosts.

From the three years' experience with our experimental farms and very careful observations during the last five years, it would appear that it is necessary to plow the land in the fall of the year so as to be prepared to sow the seed at the earliest opportunity after the snow disappears in the spring. By so doing I find that there is little risk of summer frosts unless the land is low and undrained.

At Kapuskasing River, 70 miles west of Hearst, where the Dominion Government has established an experimental farm, a few acres were sown in oats, peas, barley, wheat and potatoes. These were sown about the 20th May and gave ex-



At Cochrane Experimental Garden, showing clover and peas.



A field of rye at Hearst, Ont.

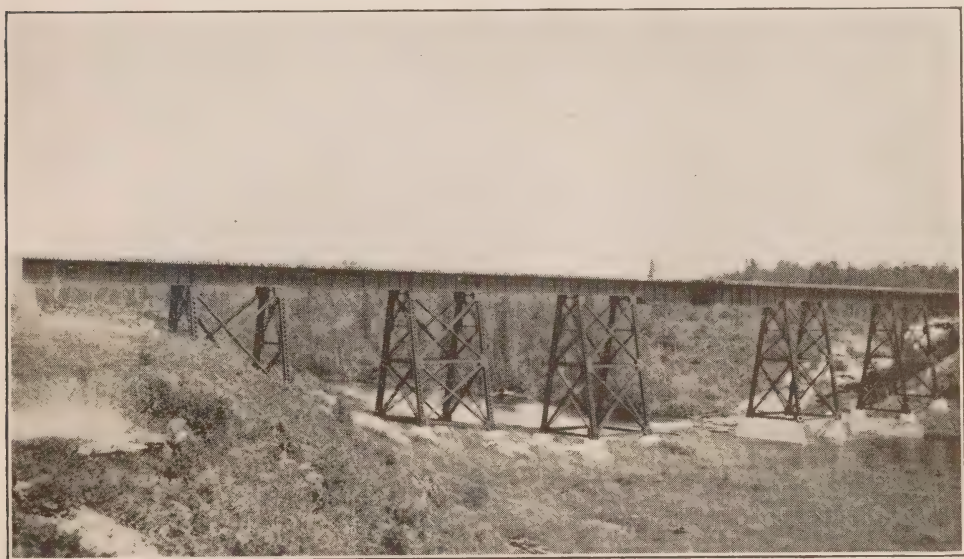
cellent results. The land was burned off in the early part of May and received little or no cultivation. Crops on the opposite side of the river, sown on the Dominion Experimental Farm, gave splendid results.

At Hearst the timothy and clover was an excellent crop. The grain crop, however, was light owing to the extremely dry weather.

At Nagagami, where the soil is a light clay or clay loam, excellent crops were produced, more particularly in potatoes, corn and other vegetables. Tomatoes ripened on the bank of the river and were a splendid crop. Clover and timothy grew in great abundance.

Throughout the entire district very little damage was done by the summer frosts, except on the low lying lands where the sub-soil was covered with considerable black loam. The high lands were comparatively free from any damage and the crops in general were as good as the crops in Old Ontario.

Timothy and clover throughout the district yielded from 3 to $3\frac{1}{2}$ tons per



A view of Nagagami River, Transcontinental Railway, 40 miles west of Hearst.

acre. Two crops of clover were cut; the second crop of red clover yielding $1\frac{1}{4}$ to $1\frac{1}{2}$ tons per acre. From the splendid growth of clover throughout the Clay Belt last season there is every appearance that the farmers in the Clay Belt will find it very profitable to grow clover seed. Where alfalfa was tested the results were very favourable.

Ground Hog Experimental Farm and Garden:

At Ground Hog, 50 miles west of Cochrane, on the experimental garden on the bank of the river and on the experimental farm about 2 miles west of the river, the results were very favourable. The following is a general report of the results obtained. On these plots more attention was given than on the before-mentioned plots:

Fall Wheat.—Three varieties of fall wheat were sown. These were Dawson's Golden Chaff, Imperial Amber and Grand Prize; the different varieties were grown

side by side, sown on September 4th and cut on August 10th. Dawson's Golden Chaff straw had a length of 3 ft. 4 in. and yielded 30 bus. per acre. Imperial Amber had a length of 3 ft. 9 in. and yielded 32 bus. per acre. Grand Prize had a length of 3 ft. 6 in. and yielded 45 bus. per acre. The grain was bright in colour, a good size and plump.

Spring Wheat.—Three varieties were tried, namely, Marquis, Prelude and Wild Goose. All were sown on April 29th on fall plowed soil. The Marquis and Wild Goose varieties were harvested on the 20th August; Prelude ripened almost two weeks earlier. It is a small headed wheat and a light yielder. Neither varieties were touched with summer frosts.

Barley.—Barley yielded exceptionally well. The grain was particularly bright and plump and weighs well. From $1\frac{1}{2}$ acres we thrashed 75 bus. of barley. It was sown on May 26th and harvested August 20th.

Peas.—A plot of Improved Crown Peas were sown on May 26th and harvested on August 26th without damage from frost. One plot of Golden Vine Peas went so much to straw that they were caught by the frost before ripening. Peas where sown with a mixture of oats yielded 55 bus. per acre.

Oats.—Different varieties of oats were sown, namely, O.A.C. No. 3, O.A.C. No. 72, Siberian, Banner, Rennie's Early Yielder and Ligawa, on May 26th and all harvested before the first frost. The O.A.C. No. 3 and No. 72 were the heavier yielders. The Siberian gave a splendid yield, while the Early Yielder was the lightest. The average yield for the entire crop was about 45 bus. per acre.

Clover.—Red clover made a remarkable showing and gave a heavy yield of cured hay. From one acre of pure red clover the first cutting gave a yield of 2 tons 600 lbs. of cured hay. One-half acre was set aside to procure seed from; the sample of seed is good. The second cut of clover gave a yield of 1 ton 400 lbs. of cured hay.

Alfalfa.—A plot of alfalfa seeded on June 1st attained a length of 14 inches during the season.

Roots.—The turnips and mangel crop was the best in our experience. The soil was plowed in the fall and manured in the fall as well, when possible. Good spring cultivation and early planting is found to give the best results. The mangels were sown on May 24th, turnips on May 24th, June 1st, June 8th and June 13th. The turnips sown on May 24th gave the heaviest yield and special mention might be made of the Holborn, Kangaroo, Swede and the hardy Prize Winning Swede turnips.

Potatoes.—The potato ground was plowed in the fall and well worked up in the spring. Just as soon as the soil has sufficient warmth in the spring planting commenced and is continued at intervals, as a rule from May 24th until June 20th. During the past three seasons our first planting was made on May 20th. Planting on this early date has never been interrupted by the frost. During the season of 1916 we planted at late as June 27th and a yield of 226 bus. per acre was obtained.

Irish Cobbler gave a yield of 280 bus. per acre; Green Mountain, 236 bus. per acre; Carman No. 1, 240 bus. per acre; Puritan, 246 bus. per acre.

Carrots, Parsnips and Beets.—These three vegetables gave a heavy yield and were of first quality, the carrots being particularly good.

Celery.—Celery did remarkably well during the present season and by planting out healthy plants with a strong clean root system this plant is a profitable one for any settler to grow.

Production of Seed.—A quantity of good turnip seed was produced on the farm in 1915. This was sown in 1916 with the seed showing good vitality and producing a heavy crop.

Small Fruits.—The season of 1916 was very favourable for the production of strawberries, red raspberries, red and black currants.

With some attention and care at the necessary time a settler would be well repaid for the labour expended.

Throughout the northern district there is a growing demand for a better class of live stock. At the Ground Hog Farm the Department has secured a few thoroughbred pigs, cattle, sheep and poultry which are doing well and are a very great benefit to the settlers. Pasture throughout the summer season, even in the dry season, never failed. Along all the old roads and burnt over areas both timothy and clover are to be found in great abundance. From the splendid results we have had on this farm and on the other experimental plots I am convinced that when the settlers can afford to cultivate their lands as is done in the older sections of the Province that equally good results will be obtained.

(Sgd.) J. F. WHITSON,

Commissioner.

To the Honourable the Minister of Lands, Forests and Mines:

SIR,—I beg to recommend the expenditure of the following amounts during the season of 1917 under the *Northern and Northwestern Ontario Development Act, 1912*, on the construction of new roads, repairing and surfacing of old roads, the construction of bridges and culverts, the clearing of Crown Lands and the operation of Experimental Farms and garden plots at and near the Towns of Cochrane and Hearst: at the Ground Hog River, 50 miles west of Cochrane; at Kapuskasing, 70 miles west of Cochrane; at the Nagagami River, 40 miles west of Hearst, all on the Transcontinental Railway; and at the Town of Matheson, on the Temiskaming and Northern Ontario Railway.

District of Rainy River:

In the Rainy River Valley, to re-surface with gravel roads constructed last season, also the opening up of new roads in the partly settled townships in the northern part of the Rainy River Valley, and draining low-lying townships tributary to the Grassy River \$35,000

District of Kenora:

To continue the grading of new roads in the agricultural section north and north-west of Dryden, and in the Valley of the Wabigoon River between the Grand Trunk Pacific Railway and the Canadian Pacific Railway, and in the partly settled townships east of Kenora 15,000

District of Port Arthur:

Re-surfacing trunk roads and the construction of new roads in the townships north, north-west and east of the City of Port Arthur, also bridge across Dog River, and the improvement of the Black Bay Road.. 30,000

District West and South of Fort William:

The re-surfacing and extension of the trunk roads under construction last season west of Fort William, the gravelling of parts of the Pigeon River or the Port Arthur, Fort William and Duluth Highway, including approach to International Bridge; the opening up of new roads in the Townships of Conmee, O'Connor, Lybster, Strange, Pearson, Paipoonge and Gillies, and two bridges on Slate River on trunk road 50,000

Sudbury and Sault Ste. Marie Trunk Road:

The construction of two bridges, one across the west branch of the Mississauga River and one across Laudouceaus Creek; the completion of the gravelling of parts of the trunk road between Cuttler and Spanish River Stations, partly under construction last season, and the gravelling of part of trunk road along the Mississauga River 35,000

Sault St. Marie:

To complete the grading and improving of the People's Trunk Road from a point about 7 miles north of Sault Ste. Marie to a point on Batchawang Bay, passing through Goulais Bay settlement, under construction last season 2,000

Manitoulin Island:

To continue the trunk road west from West Bay towards Gore Bay across the Manitoulin Island, and south to Mindemoya 10,000

District of Sudbury:

Surfacing with gravel and grading parts of the trunk road from the Village of Coniston to the Village of Warren on the Sudbury and North Bay Trunk Road; the completion of a mining road north of Onaping Station on the Canadian Pacific Railway, and the re-surfacing parts of trunk roads in the Blezard and the Chelmsford Valleys; cutting out an extension of the Shining Tree Mining Road from Shining Tree Lake to Wasabika, also cutting out of a winter road north of Shining Tree 50,000

Sudbury and North Bay Road:

Re-surfacing parts of the trunk road between North Bay and Sturgeon Falls, and the construction of bridge on the Colonization Road south of Sturgeon Falls Station	8,000
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District of Nipissing:

To extend the Mattawa and Pembroke Trunk Road east from a point 5 miles east of Mattawa	5,000
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The extension south of the North Bay, Callander and Powassan Trunk Road from South River to Burk's Falls, and the completion of the trunk road in the Township of Chisholm	18,000
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District of Porcupine:

The construction of Mining Roads in the Porcupine Mining District and Colonization Roads and Bridges in the townships along the Porcupine Branch of the Temiskaming and Northern Ontario Railway, and the Township of Mountjoy	20,000
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Temiskaming and Northern Ontario Railway:

Roads in townships east and west of the Temiskaming and Northern Ontario Railway from Cochrane south to Porquis Junction, including roads along the Iroquois Falls Branch of the Temiskaming and Northern Ontario Railway from Porquis Junction to the Abitibi River	40,000
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Roads east and west from the Temiskaming and Northern Ontario Railway extending from Porquis Junction south to Boston Creek	40,000
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Roads east and west of the Temiskaming and Northern Ontario Railway from Boston Creek south to the Village of Earleton, including the completion of a bridge over the White River east of Englehart; also extending west along the Charlton Branch of the Temiskaming and Northern Ontario Railway, and west, north-west and south-west of Charlton, including bridge across the Blanche River at Charlton	55,000
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Transcontinental Railway:

The construction of roads and bridges along the Transcontinental Railway from Abitibi River, east of Cochrane, west to the Town of Hearst, including also the clearing of lands and the construction of roads and bridges east and west of the Military Detention Camp and Dominion Government Experimental Farm at Kapuskasing	60,000
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To grade the North Bay and Trout Lake Road	2,000
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For operating Experimental Farm-plots near the Towns of Cochrane and Hearst; at the Ground Hog River, 50 miles west of Cochrane; the garden plot on the Nagagami River, 40 miles west of Hearst, all on the Transcontinental Railway; and the farm plots near the Towns of Matheson, Monteith and New Liskeard, on the Temiskaming and Northern Ontario Railway	15,000
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For the construction of stables and storehouses near railway stations for the accommodation of incoming settlers	10,000
Unforeseen work and explorations, survey of new roads, renewing of old or damaged bridges and culverts, re-surfacing and improving of old roads and the construction of short roads in sections where new settlement is taking place or mines opening up	40,000
Office and engineering expenses, equipment and plant	20,000
	<hr/>
	\$560,000
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I have the honour to be, Sir,

Your obedient servant,

J. F. WHITSON,

Commissioner.

Toronto, January 5th, 1917.

Appendix No. 37.

REPORT OF THE FORESTRY BRANCH.

PARLIAMENT BUILDINGS, TORONTO.

SIR,—I have the honour to submit the following report of the Forestry Branch for the year ending October 31st, 1916.

PROVINCIAL FOREST STATION, NORFOLK COUNTY.

Forest Nurseries.—The following is a list of the plants in the Nurseries:—

White Pine in seed beds	196,000
White Pine transplants	140,500
Scotch Pine in seed beds	200,000
Scotch Pine transplants	63,000
Red Pine in seed beds	100,000
Red Pine transplants	5,000
Jack Pine in seed beds	100,000
Jack Pine transplants	17,000
Arbor Vitæ transplants	72,000
Miscellaneous Conifers	10,000
Black Locust	45,500
Black Walnut	12,500
Butternut	33,000
Sugar Maple	32,000
White Maple	16,800
Red Maple	2,600
White Ash	4,600
American Elm	5,400
Manitoba Maple	5,300
Chestnut	2,500
Red Oak	2,000
Miscellaneous Hardwoods	5,000
Total	<hr/> 1,070,700



THE WHITE-PINE BLISTER RUST

Figure "A" shows a young white pine with open blisters and swollen bark.
 Figure "B" shows a leaf of flowering currant bearing the early current stage.
 Figure "C" is a part of the same leaf much magnified and showing four of the spore masses.
 Figure "D" shows a black currant leaf bearing the late filamentous stage, this being the stage in which it is transmitted to the pine trees.

"A," "B" and "D" natural size.

This last season proved to be very unfavourable for the propagation of coniferous seedlings. The extreme wet weather just after seeding caused considerable loss. This was followed by extreme drought during July and August so that the seedlings have entered the winter in somewhat unfavourable conditions.

Forest Planting.—The demand for nursery stock for forest planting has fallen off considerably during the past two years. This is probably owing to the labour situation created by war conditions. Last spring we shipped to private owners for demonstration forest planting work, about 150,000 plants.

WHITE PINE BLISTER RUST.

During the past season the Forestry Branch has had charge of the investigation of the "White Pine Blister Rust," which is a plant parasite introduced from Europe during the past decade.

Description of the Disease.—This disease attacks only the five-leaved pine group, to which our white pine belongs. Red or Norway and other two-leaved pines are immune.

The fungus causing the disease belongs to the rusts, of which the wheat rust is a well-known example. Like the wheat rust, the White Pine Blister Rust has two entirely different hosts. These are the white pine for one stage of growth and currants and gooseberries for the other stage.

The life history of the blister rust is as follows: The winter spores (seeds) produced during late summer and autumn upon the currant and gooseberry leaves (Figure D) are blown to white pines in the vicinity. They stick to the bark of young trees or branches, germinate, and the young threads penetrate the inner bark tissues. There is no visible sign of the attack for from one to several years, after which a thickening of the region occurs, finally resulting in a more or less spindle-shaped swelling. On this area, early in the spring, blisters appear filled with orange-yellow spores. The blisters break open, setting free the spores inside. This is the most conspicuous stage of the disease on the pine, but lasts only from about the middle of April to the middle of June. (Figure A.)

The spores (seeds) liberated from the pine blisters are blown about and fall upon the leaves of any currants or gooseberries that may be in the vicinity. Here they germinate at once and infect the leaves. In the course of a couple of weeks a new crop of spores (summer spores) is produced in tiny orange pustules on the lower surface of the currant or gooseberry leaves. (Figure B.)

These summer spores on being liberated in turn infect other currant and gooseberry leaves, and in another two weeks there is a new crop of summer spores on the new host. (Figure B.) The repetition of this cycle spreads the disease rapidly during the summer in an area which is constantly enlarging.

Towards the latter part of summer the currant and gooseberry leaves produce on their lower surface slender horn-like outgrowths, which give rise to a different kind of spore. (Figure D.) These are known as winter spores and are capable of attacking pines but not currants or gooseberries.

From this account it is evident that the two hosts are necessary for this disease to spread. By successive infections of summer spores from diseased currants or gooseberries, this process repeated over and over again during the summer, the disease may spread long distances, and in the autumn infect white pines by means of the winter spores. These winter spores will attack only the pine. In the following spring the spores produced on pine re-infect the currants and goose-

berries, and the spreading march commences anew. The eradication of the disease accordingly can only be brought about by the destruction of the hosts in infected areas.

The stage of the rust upon the pine is the one in which the chief damage is done. The fungus lives year after year in the bark tissues of the pine until the stem or branch is girdled and the portion above dies. It is sure to kill the affected trees if the attack is on the stem.

During the past season we have had six Inspectors travelling throughout the older parts of Ontario locating where the disease may have obtained a foothold.

In addition to the work of these Inspectors, we have had very valuable assistance and co-operation from Mr. McCubbin who has charge of the Federal office of plant pathology at St. Catharines. We have also had the valued assistance of Prof. Howitt, Botanist of the Ontario Agricultural College. The following is a summary of the location and status of the disease as it now exists in Ontario:—

A.—EASTERN LIMIT.

I. *Durham County.*

1. Clarke Tp.—One pine and a few adjacent currants diseased in 1915. No trace of disease found in 1916.
2. Darlington Tp.—Seventy-five pines diseased. Currant rusted area involved eight miles in a north and south direction; survey for east and west limits unfinished. All infected pine removed.

II. *Victoria County.*

1. Ops Tp.—Three pines diseased. Currant rust progressed a maximum distance of three miles (S. E.) from original centre, involving ninety bushes in ten town gardens. All infected pines removed.

B.—NORTHERN LIMIT.

I. *Simcoe County.*

1. W. Gwillimbury Tp.—One hundred and ninety-four pines diseased. Currant rusted area now eleven miles square. All infected pines removed.

C.—WESTERN LIMIT.

I. *Elgin County.*

1. Dunwich Tp.—Currant rust found in 1915. No currant rust found in 1916.
2. Bayham Tp.—Eight rusted currant bushes in two locations.

D.—INTERIOR.

- I. *Wellington County.*—One infected pine found early in spring and removed. No currant infection in 1916.

II. *Brant County.*

1. Brantford Tp.—Two pines and one currant bush diseased in 1915. No trace of disease in 1916.

III. *Halton County.*

1. Trafalgar Tp.—Eight trees and currant rust in 1915. Twenty-two trees in 1916; much currant rust in 1916 on seventeen properties.

E.—NIAGARA PENINSULA.

I. *Wentworth County.*

1. Saltfleet Tp.—Rust in seven currant properties.

II. *Haldimand County.*

1. S. Cayuga Tp.—Two rusted currant bushes.

III. *Lincoln County.*

1. Clinton Tp.—	61	patches of diseased currants found.		
2. Gainsboro Tp.—	10	"	"	"
3. Grantham Tp.	1	"	"	"
4. Grimsby Tp.	53	"	"	"
5. Louth Tp.	37	"	"	"

IV. *Welland County.*

1. Bertie Tp.—	17	"	"	"
2. Crowland Tp.—	3	"	"	"
3. Pelham Tp.—	45	"	"	"
4. Stámford Tp.—	18	"	"	"
5. Thorold Tp.—	31	"	"	"
6. Willoughby Tp.—	7	"	"	"

A large number of White Pine infections have been found in the Niagara Peninsula, especially in Pelham, Thorold and Grimsby townships. Many of these infections have been found on native pine. The disease has become firmly established in this region and presents a serious problem owing to the prevalence of both currants and White Pine.

RAILWAY FIRE PROTECTION.

The Province of Ontario has during the past season employed twelve Inspectors to cover the railway lines coming under the jurisdiction of the Board of Railway Commissioners for Canada. These men investigate and report on fires; inspect fire protective appliances on locomotives; report on right-of-way conditions as related to fire hazards, and inspect fire patrols as required by the Board. The details of this inspection work was outlined in our report of 1915.

STATISTICAL REPORT OF FIRES ORIGINATING WITHIN 300 FEET OF RAILWAY LINES IN
ONTARIO FOR THOSE LINES SUBJECT TO THE JURISDICTION OF THE BOARD
OF RAILWAY COMMISSIONERS FOR CANADA. SEASON, 1916.

	C. N. R.	G. T. R.	C. P. R.	A. C.	Totals
<i>(a) Railway Fires:</i>					
1. Number, by causes:—					
(a) Locomotives, Class *A fires	4	8	2	.....	14
Class †B fires	56	13	29	1	99
(b) Employees, Class A fires.	.....	.....	2	.....	5
Class B fires.	3	.....	.....	.....	.....
(c) Total of Class A fires	4	8	2	.....	14
Total of Class B fires	59	13	31	1	104
Total of railway fires	63	21	33	1	118
2. Areas burned (acres):—					
(a) Young forest growth	361	26	124	.....	511
(b) Timber land	546½	.....	129	.....	675½
(c) Slashing or old burn	875¼	164¾	536	5	1,563
(d) Other classes of land	40⅞	50	44⅞	.....	135½
(e) Total	1,805⅞	240¾	833⅞	5	2,885
3. Value of property destroyed:					
(a) Young forest growth	\$475 50	\$41 00	\$169 50	.....	\$686 00
(b) Standing timber	722 00	.....	552 50	.....	1,274 50
(c) Forest products	18 75	.....	.....	.....	18 75
(d) Other property	622 50	5 00	138 65	.....	766 15
(e) Total	\$1,838 75	\$46 00	\$860 65	.....	\$2,745 40
<i>(b) Known Causes other than Rail- way Systems.</i>					
1. Number due to:—					
(a) Campers and Travellers, Class A fires .....	.....	.....	.....	.....	.....
(a) Campers and Travellers, Class B fires	3	1	1	1	6
(b) Settlers, Class A fires ....	.....	.....	.....	1	1
Class B fires .....	.....	.....	.....	.....	.....
(c) Other known causes, Class A fires .....	.....	.....	1	.....	1
(c) Other known causes, Class B fires	2	.....	.....	.....	2
(d) Total of Class A fires ....	.....	.....	1	.....	1
Total of Class B fires	5	1	1	2	9
Total of other known causes	5	1	2	2	10
2. Areas burned:					
(a) Young forest growth ....	.....	.....	.....	.....	.....
(b) Timber land	3	.....	.....	.....	3
(c) Slashing or old burn	1,053¼	.....	.....	25	1,078¼
(d) Other classes of land ....	.....	¼	1	1½	2¾
(e) Total	1,056¼	¼	1	26½	1,084¼
3. Value of property destroyed:					
(a) Young forest growth	\$100 00	.....	.....	.....	\$100 00
(b) Standing timber	65 00	.....	.....	.....	65 00
(c) Forest products .....	.....	.....	.....	.....	.....
(d) Other property .....	.....	.....	.....	.....	.....
(e) Total	\$165 00	.....	.....	.....	\$165 00

*Class A represents fires of less than one-quarter acre in extent.

†Class B represents fires of one-quarter acre and over.

STATISTICAL REPORT OF FIRES ORIGINATING WITHIN 300 FEET OF RAILWAY LINES
IN ONTARIO, ETC.—Continued.

	C. N. R.	G. T. R.	C. P. R.	A. C.	Totals
<i>(c) Fires of Unknown Origin:</i>					
1. Number:—					
(a) Total of Class A fires	2	1	.....	.....	3
(b) Total of Class B fires	9	.....	6	.....	15
(c) Total of all unknown fires	11	1	6	.....	18
2. Areas burned:					
(a) Young forest growth	40	.....	5	.....	45
(b) Timber land .....	.....	.....	1	.....	1
(c) Slashing or old burn	56½	.....	15	.....	71½
(d) Other classes of land	11¼	½	5½	.....	16¾
(e) Total	107¾	½	26½	.....	134¾
3. Value of property destroyed:					
(a) Young forest growth	\$20 00	.....	\$5 00	.....	\$25 00
(b) Standing timber .....	.....	.....	10 00	.....	10 00
(c) Forest products	90 00	.....	.....	.....	90 00
(d) Other property	404 00	.....	.....	.....	404 00
(e) Total	\$514 00	.....	\$15 00	.....	\$529 00
<i>(d) Grand Totals for all Causes:—</i>					
1. Number:—					
(a) Total of all Class A fires..	6	9	3	.....	18
(b) Total of all Class B fires..	73	14	38	3	128
(c) Total of all fires reported.	79	23	41	3	146
2. Areas burned:					
(a) Young forest growth	401	26	129	.....	556
(b) Timber land	549½	.....	130	.....	679½
(c) Slashing or old burn	1,967½	164¾	551	30	2,713
(d) Other classes of land	52¾	50¾	51½	1½	155¾
(e) Total	2,969¾	241½	861½	31½	4,103¾
3. Value of property destroyed:					
(a) Young forest growth	\$595 50	\$41 00	\$174 50	.....	\$811 00
(b) Standing timber	787 00	.....	562 50	.....	1,349 50
(c) Forest products	108 75	.....	.....	.....	108 75
(d) Other property	1,026 50	5 00	138 65	.....	1,170 15
(e) Total	\$2,517 75	\$46 00	\$875 65	.....	\$3,439 40

REPORT

OF THE

Minister of Lands, Forests and Mines

OF THE

PROVINCE OF ONTARIO

For the Year Ending 31st October

1917

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO



TORONTO:

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Bridal Veil Falls at Kagawong, Manitoulin Island, on the highway between
Little Current and Gore Bay.

Report of the Minister of Lands, Forests and Mines of the Province of Ontario

For the Year Ending 31st October, 1917

To His Honour the Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to submit for the information of your Honour and the Legislative Assembly a report for the fiscal year ending 31st October, 1917, of the management of the Crown Lands of the Province.

CLERGY LANDS.

The collection on account of Clergy Lands was \$976.78. No land was disposed of during the year. (See Appendix No. 4, page 9.)

COMMON SCHOOL LANDS.

The collection on account of former sales was \$3,333.59. (See Appendix No. 4, page 9.)

UNIVERSITY LANDS.

The area of these lands sold during the year was 2,074.73 acres for \$1,802.37. The collection on account of these and former sales was \$2,598.91. (See Appendix No. 3, page 8.)

CROWN LANDS.

There was sold during the year for agricultural and town site areas 109,303.53 acres for \$78,105.76. The collection on account of these and former sales was \$63,079.87. There was sold for mining purposes 20,154.31 acres for \$52,985.64. There was collected on account of these and former sales \$57,054.50.

There was leased for mining purposes 4,962.29 acres for \$4,722.44. There was collected on account of these leases and those of former years \$16,884.67. There was leased of Crown lands an area of 29,068.88 acres for \$3,245.09. There was collected on account of these and the leases of former years \$62,845.01.

The total area of Crown lands disposed of by sale and lease during the year was 165,628.06 acres for a value of \$140,948.30, as compared with 133,447.01 acres sold and leased in 1915 for \$113,397.18. The total collection on account of the sales, leases, etc., was \$208,551.69. (See Appendix No. 3, page 8.)

SALES.

During the fiscal year ending 31st October, 1917, there were disposed of for settlement purposes under Part I, of the *Public Lands Act*, approximately 104,000 acres, an area slightly in excess of the previous year. The number securing farms in Northern Ontario throughout the Temiskaming and Hearst Sections was, as might be expected, somewhat less than the preceding period. When the war conditions are considered and the labour and industrial situation is taken into account, with the demand for the application of productive forces apart from the farm and field, it is a source of gratification to find that over 650 new land seekers purchased farms in Northern Ontario in the past year. With immigration inactivity the source of supply for colonists must necessarily be very largely, if not wholly, our own Province, and with this limited field before us it cannot be reasonably expected that land settlement will, during the progress of hostilities, attain anything like the standard it should reach in normal times. The universal appeal on the part of governments and astute economists throughout the British Empire has, undoubtedly, set many thinking and urged numbers to seriously consider the necessity of trekking back to the land.

Hundreds of Northern Ontario settlers are serving their country at the front, and many have already paid the supreme sacrifice. The Department has, since the outbreak of the Great War, extended to the enlisted soldier protection against the jumping of his claim, and will, on his return, render him every opportunity of meeting the necessary requirements incidental to acquiring absolute title to his land.

For the first time in its history the annual report contains in detailed form a statement showing the different land agencies throughout the Province, with the townships comprising each and the number of land transactions recorded in townships other than Free Grant. A cursory glance will disclose the number of sales, patents, etc., in the respective townships and hereafter the public will have ready access to this information, as it has always had to similar information in respect of Free Grant operations. With a view of checking up spurious land holders, who pose as bona fide settlers and of eliminating them to make way for active farmers, the Department made a special examination of some of the more important townships on the Transcontinental Railway. This resulted in cancelling a number of claims and withdrawing from further sale the townships of Calder, Shackleton, Eilber, Fournier and Kendal. These areas may later on be utilized in dealing with a further development of the Returned Soldiers' Scheme. (See Appendix No. 15.)

Consideration has been given to the question of more carefully scrutinizing the class of individuals seeking land.

In the sale or allocation of Crown Lands of the Province each applicant has always been required, preliminary to being eligible for land, to make an affidavit subscribing to certain statements as to his age, his desire to become a settler, and his intentions of performing the settlement duties as prescribed by law; but the would-be settler has not been called upon heretofore to state his birth-place, his nationality or his intentions to become a British subject, if not already one; nor has any provision in the past been made requiring a declaration of obedience to all the laws in force in the Province, both Dominion and Provincial.

In the absence of such data as implied in the last mentioned requirements, it has been impossible to keep fully seized in each case of important facts as respects the individual applicant, whose desirability as a settler is most essential.

For the purpose of securing and maintaining a desirable class of settlers on the Crown Lands of the Province and of being fully apprised of the nationality and law-abiding intentions of would-be locatees, and, furthermore, with a view of aiding and urging a win-the-war policy, and at the same time promoting the cause of greater production, certain detailed information, in addition to that heretofore furnished by applicants, will hereafter be required.

Also for the purpose of more effectively discouraging and preventing "squating" or unauthorized possession of Crown Lands, and of more readily enforcing the laws and regulations as regards land settlement, it was deemed expedient that individual applicants should be made to realize the importance and necessity of faithfully meeting their obligations, both to the Province of Ontario and the Dominion of Canada, and should be required to subscribe to adequate promises incidental to being eligible to purchase or locate lands.

Applicants from this time on must state their nationality, and if not British, promise to take steps to become naturalized and to obey unreservedly all the laws and regulations, both of the Dominion of Canada and Province of Ontario, under the penalty of forfeiting all rights in or to the land or money paid on account of same.

RANCHING LEASES, LICENSES, ETC.

While only one ranching lease of any size was issued throughout the year, inquiries continue to reach the Department from many quarters as to grazing possibilities. The importance and necessity of increasing stock production has given an impetus to the cattle and sheep raising industry, and with an annual rental of only five cents an acre per annum and easy conditions as to stocking offered by the Province of Ontario, substantial development in this business should be looked for. While no technical attempt has yet been made to segregate the various grazing areas from those that are primarily agricultural, etc., the Department holds in readiness for the service of those likely to be interested in promoting the cause of ranching on Crown areas, certain information preliminary to enabling would-be ranchers going personally over areas and making a selection on their own behalf.

In addition to the one grazing lease there were twenty-three Crown Leases issued during the year for water power and other purposes.

Licenses of Occupation to the number of fifty-three were issued and these covered for the most part authority to occupy mining claims although other purposes were represented: mill sites, water lots, power lines, ranching, public sites, water mains and fur farms. These licenses are made subject to the pleasure of the Crown and thus their elasticity is ample protection to the public interests. For the rights to secure sand and gravel, licenses to the number of twenty-two were issued during the year.

Under Appendix No. 8 may be seen a statement of all the instruments including patents, etc., issued for the entire fiscal year.

FREE GRANTS.

A slight reduction is found in the number of Free Grant locations carried out for the fiscal year ending October 31st, 1917: the number of locatees being 610 for an area of 78,192 acres, while 620 secured land in 1916 covering 85,139 acres. There were 147 locatees who availed themselves of the statutory privilege to pur-

chase additional areas and in this way obtained 6,210 acres; last year 155 purchased for 5,191 acres, so that the average parcel purchased during the past year is somewhat larger.

Certain locatees, numbering 217, for good and sufficient reasons, were allowed to sell their improvements and assign their locations, their assignees succeeding to their rights and obligations.

In Free Grant townships 449 patents were issued to parties, the great majority of whom were actual settlers who had completed their residence and other settlement duties. The other patentees were those who had acquired title for summer resort purposes.

No new townships were placed on the market during the year. Generally speaking the transactions in respect of Free Grant lands and Homesteading were practically the same as in the preceding year, although the numbers seeking free homesteads have very naturally decreased and this is borne out by the figures as compiled in detail under Appendix No. 14.

The obvious lull is due partly to war conditions and partly also to the gradual lessening of ready accessible, arable Free Grant lands. The old sections have been largely sought in the past and, of the Free Grant lands now open, only a small percentage of the first-class farming areas remains. In the earlier development of land settlement the Free Grant sections were eagerly seized upon, and in this way practically all the Rainy River Valley has been settled as well as Thunder Bay District, and a goodly proportion of the agricultural sections of Kenora. The fact that within recent years the new townships opened have been in the Great Clay Belt and are subject to Sale Regulations, has noticeably affected the tabulated results in Free Grants. Moreover, in 1915 several townships in the Sudbury section were withdrawn because of their inclusion in the sulphur area.

With the older arable portions of townships cruised and well settled, with no new lands being opened for Free Grants, and with the standstill condition of immigration and other war tendencies, it is not unreasonable to presume that for the continuance of the war, at least, there will be no appreciable increase in the number of Free Grant settlers.

MILITARY GRANTS.

The total number of Military Certificates issued to date, under the Veterans Land Grant Act, 1 Edw. VII, Cap. 6, and amendments thereto, is 13,998. During the year 96 letters were received from men or from the next of kin of veterans who had served on the frontier during the Fenian Raid, but had only now heard of this grant and asked for application forms. As the time for receiving these applications expired on 30th September, 1908, these application forms could not be sent to them.

During the year there have been 87 certificates located covering 13,986 acres in the townships open for veterans, making in all a total of 8,261 certificates located.

There were 3 certificates surrendered to the Crown for the \$50.00 commutation money; this makes a total of 3,257 certificates surrendered.

In 14 cases the certificates have been surrendered and applied in payment of lands purchased from the Crown, covering in all 2,240 acres, making a total of 774 certificates that have been applied in this manner.

During the year there have been 158 patents issued for lands located by veterans, making a total of 7,222 thus disposed of.

The total number, therefore, of certificates that have now been redeemed is 12,355, leaving 1,643 still outstanding.

Under the Act 1st Edw. VII, Cap. 6, and amendments thereto covering these grants it is necessary for all locatees of the lands granted under this Act to apply for their patents for such land before ten years have expired from date of location. If this application for patent is not made within the ten years then the land comes under the settlement regulations, and unless the settlement duties are proceeded with, the locations are liable to cancellation. Previous to the expiration of the ten years after location, the Department has sent a notice to each veteran who should apply for his patent stating this fact, and in this manner have saved many of the locations from becoming subject to the settlement duties. See Appendix No. 11, page 53.

FINANCIAL ASSISTANCE TO SETTLERS.

Since August 12th, 1916, 1,238 applications for loans have been dealt with by the Settlers' Loan Commissioner. Loans amounting to \$383,968.57 have been made.

There is no doubt as to the benefit which has been derived by the settlers from the advances which have been made by the Department. In many cases reports have come to the Department of settlers being enabled to remain on their clearings and devote their whole time to work on their holdings, securing results that otherwise they would have been unable to accomplish.

Production in Northern Ontario during the coming season will clearly demonstrate the benefits derived from the loans which have been made.

For particulars *re* loans refer to Appendix 28.

THE MINING INDUSTRY.

The annual reports of the Bureau of Mines deal fully with the mining industry of the Province, and it is, therefore unnecessary to go into detail on this subject here. Statistics of production of the metalliferous mines and works of Ontario for the nine months ending 30th September, 1917, have been collected by the Bureau and may, however, be given. The metallic output for the calendar year may be closely approximated from these figures. The value of the mineral production of the Province is now upwards of sixty-five millions of dollars per annum, and Ontario easily leads all the other Provinces in this branch of industrial activity. The steady growth of mining in Northern Ontario, by providing a ready home market for farm products, is proving, and will continue to prove, one of the chief factors in the settlement and colonization of the agricultural areas of the Crown domain.

The table is as follows, and for purposes of comparison, figures for the corresponding period of 1916 are also given:

Notwithstanding the falling off in the output of gold, silver and copper, the aggregate value for the nine months was some \$2,000,000 more than for the same

period in 1916. Increased prices for silver, copper and nickel are largely responsible for this increase:

		Quantity.		Value \$	
		1916	1917	1916	1917
Gold.....	ounces	365,955	343,490	7,513,734	6,754,535
Silver.....	"	16,203,091	15,236,002	9,750,040	12,001,875
Cobalt (metallic).....	lbs.	172,055	295,866	146,467	433,739
Nickel.....	"	17,435	166,921	7,618	67,499
Nickel (oxide).....	"	54,152	10,831	6,381	3,025
Cobalt.....	"	378,732	276,769	231,947	323,162
Other Cobalt and Nickel com- pounds.....	"	57,026	276,217	22,890	30,025
Molybdenite.....	"	15,845	65,827	15,845	83,550
Copper ore.....	tons	1,715	2,658	21,685	33,419
Nickel in matte.....	"	31,046	31,064	15,523,000	15,532,000
Copper in matte.....	"	16,989	15,928	6,285,930	6,371,200
Iron ore (exported).....	"	.....	98,757	.....	412,401
Pig Iron from domestic ore.....	"	.....	48,820	.....	936,118
Lead.....	"	.....	540	.....	136,948
Total.....		.....	.....	.....	43,119,496

Gold.—Of the total production, the Hollinger mine yielded 161,702 ounces; McIntyre, 59,779 ounces; and Dome, 58,978. Gold being the standard of value, and having a fixed price, was the only metal which did not share in the general increase of prices. Indeed, the high price of labour and supplies have, for the time being, lowered the rate of expansion for this branch of the industry. The output for the first nine months of this year was some 20,000 ounces less than for the corresponding period of 1916.

Evidence accumulates that the gold resources of Northern Ontario are extensive. Developments at Porcupine have been satisfactory, and Kirkland Lake shows signs of being a good second. A satisfactory feature is that the newer gold camps are scattered over a wide area of territory.

Silver.—The average price of silver was 79.758 cents—the low being 71.75 on March 27th, and the high 108.50 on September 25th. The following mines were the leading shippers: Mining Corporations of Canada, 3,831,211 ounces; Nipissing, 2,839,462 ounces; Kerr Lake, 1,708,921 ounces; Coniagas, 976,315 ounces; O'Brien, 925,000 ounces; McKinley-Darragh-Savage, 775,566 ounces; Miller Lake O'Brien, 757,132 ounces.

Nickel and Copper.—Both these metals have risen in price, and are valued in these statistics at 25 cents and 20 cents per pound, respectively, for the metallic contents of the mattes produced. Nickel is quoted at 50 to 55 cents per pound, and the United States Government has now fixed the price of copper at 23½ cents per pound. The mines of Sudbury are now, and have been for some time, working at maximum capacity. The nickel contents of the mattes for the nine months of 1917 were a little larger than for the same period in 1916, but the copper contents were about 1,000 tons lower. The International Nickel Company's new refinery at Port Colborne is well under way, and is expected to be turning out refined nickel before next spring.

Iron Ore and Pig Iron.—In addition to exported ore, 138,808 tons were shipped to Ontario smelters. Of the total of 983,321 tons of ore smelted, only 93,536 tons, or 9.5 per cent., were Ontario ore. The total pig iron produced was 513,232 tons, worth \$9,841,438 as compared with 501,410 tons, worth \$6,686,965 in 1916 for the corresponding period. This shows an advance of nearly 50 per cent. in the value of pig iron.

COLLECTIONS.

The total revenue of the Department from all sources was \$3,579,196.06. Of this \$63,079.87 came from agricultural lands and town sites; mining lands \$57,054.50; mining and crown leases \$80,544.18; miners' licenses, permits and recording fees \$62,256.41; supplementary revenue tax \$1,557,543.37. From woods and forests the revenue was \$1,695,703.08 made up of the following items, bonus \$640,835.35; timber dues \$832,467.24; ground rent \$100,408.33; transfer fees \$6,665.10; fire protection charge \$115,327.06. (See Appendix No. 4, page 9.)

DISBURSEMENTS.

The total expenditure of the Department for ordinary services was \$903,154.27. Some of the principal items were: Crown Land agents' salaries and disbursements \$16,861.54; homestead inspectors \$16,333.25; Crown timber agents \$32,040.62; wood ranging and estimation of timber \$120,152.20; fire ranging \$337,933.50; forest reserves, fire ranging, etc., Temagami reserve \$39,694.04; Metagami reserve \$8,252.02; Mississaga reserve \$26,854.08; Nipigon reserve \$27,752.36; Eastern reserve \$2,704.17; Sibley reserve \$100.00; mines and mining \$52,578.65; mining records \$25,925.15; surveys \$43,214.75; contingencies, lands and forests \$48,137.30; bureau of mines \$10,362.50.

A further sum of \$88,554.93 was expended under the direction of the Department, distributed as follows: Algonquin Park \$33,623.89; Quetico Provincial Park \$9,056.50; Veteran's Commutation \$150.00; Royal Nickel Commission \$45,721.64. (See Appendices Nos. 5 and 6.)

WOODS AND FORESTS.

The accrued revenue from woods and forests for the year ending 31st October, 1917, amounted to \$1,496,063.45 or \$90,638.39 in excess of previous year.

The revenue collected also shows a satisfactory increase over preceding year, \$1,695,703.08 being collected as against \$1,335,320.78 for year ending 31st October, 1916, an increase of \$360,382.30.

The production of pine timber—saw logs and dimension timber—is nearly one hundred million feet board measure less than that of previous season, and almost two hundred million feet, board measure, less than that for year ending October 31st, 1915. The falling off in production of timber other than pine was not so marked, being only one million four hundred and seventy-seven thousand eight hundred and sixty-three feet, board measure, less than previous year.

While the production of pine timber has steadily declined, shortage of labour, due to the war, has contributed largely to the falling off of the past two years. The lumber firms have experienced great difficulty in manning their camps and in many cases have been forced to lessen the number of camps.

The number of railway ties taken out was more than double the number of cut during previous season; 1,544,826 were taken out as compared with 738,597 in 1916.

Two hundred and twenty-two thousand three hundred and seven cords of pulpwood was cut upon settler's lands during season 1916-17. Total number of cords of pulpwood cut on settler's lands and lands of the Crown, 445,978.

Two hundred and twenty-three thousand six hundred and seventy-one cords of pulpwood was taken off Crown lands, season 1916-17, an increase over previous season of 54,158 cords.

Sales of the Pic River Pulp and Timber Limit and Black Sturgeon Pulp and Timber Limit referred to in 1916 report were carried out, the highest price ever tendered for pulpwood being obtained.

Recently what is known as the Kapuskasing Pulp and Timber Limit was offered for sale. These three limits add 3,594 square miles to the area of pulp lands covered by concessions.

LANDS UNDER LICENSE.

The area under license last year was 16,313 $\frac{3}{4}$ square miles, which was 601 $\frac{1}{2}$ square miles greater than the area under license the previous season.

SOURCES OF REVENUE.

The ground rent received amounted to \$100,408.33, being \$11,190.84 more than in the preceding year.

Six thousand six hundred and sixty-five dollars and ten cents was collected as transfer fees as against \$3,640.00 for 1916.

Licensees and other holders of timber concessions were required, under the terms of the new Regulations, to pay a fire protection charge of \$6.40 per square mile, and the amount received from this source totalled \$115,327.06.

The revenue collected during the year ending October 31st, 1917, was made up as follows:

Timber Dues	\$832,467 24
Bonus	640,835 35
Ground rent	100,408 33
Transfer Fee	6,665 10
Fire Protection	115,327 06
	<hr/>
	\$1,695,703 08

CULLER'S EXAMINATION.

Two Culler's Examinations were held during the year, one at North Bay and the other at Kenora. Eight candidates succeeded in passing the examination and were duly granted certificates authorizing them to act as Cullers.

(For complete list of Cullers see Appendix 12, page 54.)

FIRE RANGING.

Under the legislation passed during the Session of 1917 radical changes were made along the line of forest protection.

The Permit System, relating to the burning of slash by settlers, was inaugurated, 3,486 permits, covering 15,186 acres, being issued during the past season by

members of the fire ranging staff. Generally speaking, the settlers co-operated heartily, and results amply justify the new regulation.

The area protected was divided into thirty-four districts, each in charge of a Chief Ranger. Over the Chief Ranger were three territorial Inspectors, with headquarters at Cochrane, Nipigon and North Bay. The general field work was supervised by a Provincial Superintendent.

The number of rangers was largely increased, owing to the addition of rangers on licensed lands, the introduction of the permit system, and the protection of areas where none had previously existed.

FOREST FIRES.

The weather in the early part of the fire season was dry, and a number of fires of some magnitude occurred in the western part of the Province, fortunately attended by no loss of life. A total of 1,110 fires was reported, the greater number being of small extent. Five hundred and forty-nine of the fires reported were caused by railways—the Canadian Government railways being responsible for 332 of this number. The neglected camp fire was a fruitful source of fires. Only 8 per cent. of the total number of fires was caused by settlers clearing land—an ample justification of the Permit System.

IMPROVEMENT WORK.

During the season 62 Lookout Towers were constructed, 26 Observation points were built, numerous trails were cut and a considerable addition was made to the existing telephone system. Four large storehouses for equipment were built, also 44 rangers' cabins, 3 boathouses, 3 hose houses, and numerous other improvements of a minor nature.

EQUIPMENT.

It was found necessary to add largely to the equipment during the past season. Twenty-eight railway velocipedes were added to the stock and a number of auto-trucks and motor boats were installed where such equipment could be used to best advantage.

FORESTRY.

The work of forest planting is necessarily hampered by the shortage of labour owing to war conditions. Valuable work is, however, being accomplished at the Provincial Forest Station in Norfolk County.

A complete summary of the activities of the Forestry Branch will be found in Appendix 34.

CROWN SURVEYS.

The following surveys of Crown lands have been completed during this year:
Islands in Lake Huron, north of Manitoulin Island, district of Algoma.

Islands in Lake Huron, north of Manitoulin Island, district of Manitoulin.

Islands in Georgian Bay, district of Sudbury.

Part of south boundary and east boundary, Nipigon Forest Reserve, district of Thunder Bay.

Township of Foleyet, district of Sudbury.

Township Muskego, district of Sudbury.

Part of the township of Keith, district of Sudbury.

Survey of outlines of townships of Wickstead, Haig and Farquhar, district of

Algoma.

Boundary line between the townships of Gooderham and Kenny, district of

Nipissing.

Survey of lakes Mesomikenda and Minisinakawa, district of Sudbury.

Survey of town plot on Bear Island, Timagami Lake, district of Nipissing.

Timber lines in the townships of Ogden, Bristol and Thornloe, district of

Timiskaming.

Timber lines in the township of Notman, district of Nipissing.

Timber lines in the township of Sweeny, district of Sudbury.

See Appendix No. 16, page 76.

For Crown Surveys in progress, see Appendix No. 17, page 77.

MUNICIPAL SURVEYS.

Seven municipalities petitioned for surveys and instructions were given authorizing the same. One of these and four other municipal surveys, for which instructions had previously been given, were confirmed during the year under R.S.O. 1914, Cap. 166, Sections 13 and 14, such surveys being final and conclusive.

The survey of the Toronto and Hamilton Highway, between the westerly limit of the city of Toronto and the westerly limit of the town of Oakville, was also performed under instructions as required by Statute 5, George 5th, Cap. 18, and the boundaries of such portion of the highway as defined by the survey duly confirmed.

Particulars relating to these will be found in Appendices No. 18 and No. 19, pages No. 78 and No. 79.

RETURNED SOLDIERS AND SAILORS—LAND SETTLEMENT.

In the spring of 1917 the Land Settlement Scheme for returned soldiers was put in operation. In adopting the plan of settlement which had been decided upon it was endeavoured to devise a system which would result in placing considerable numbers of returned men on the land in communities, having a common centre, avoiding in large measure the isolation which unfortunately has prevailed in many of the northern districts.

The work of the past year has naturally been largely experimental, but the result, to date, has been sufficiently satisfactory to warrant a very considerable extension of the scheme for the coming season.

Report as to the work that has been accomplished will be found in Appendix No. 35.

G. H. FERGUSON,

Minister.

Department of Lands, Forests and Mines,
Toronto, October 31st, 1917.



Spanish River Pulp and Paper Mills at Espanola.

APPENDICES

Appendix No. 1.

Return of Officers and Clerks of the Department of Lands, Forests and Mines for the year ending October 31st, 1917.

Branch.	Name.	Designation.	When Appointed.	Salary per annum.	Remarks.
Lands Branch	Hon. G. H. Ferguson.....	Minister	1914, Dec. 22.....	\$6,000 00	
	Albert Grigg	Deputy Minister	1915, Oct. 13.....	4,200 00	
	C. C. Hele	Minister's Secretary and Secretary to Department.....	1912, Jan. 23.....	2,500 00	
	J. Farrington	Clerk	1916, Jan. 6.....	1,200 00	
	A. G. Thompson	do	1909, Mar. 24.....	900 00	
	M. Johnston	Stenographer	1915, Oct. 9.....	750 00	Resigned April 30, 1917.
	J. J. Murphy	Advisory Chief Clerk	1872, May 1.....	2,300 00	
	W. C. Cain	Chief Clerk	1903, Mar. 6.....	2,100 00	
	H. E. Johnston	Clerk of Military Grants	1907, Mar. 13.....	1,750 00	
	W. R. Ledger	Clerk of Sales	1894, Feb. 5.....	1,600 00	
	S. Draper	Clerk of Free Grants	1903, Jan. 1.....	1,500 00	
	S. A. Platt	Clerk	1907, Mar. 13.....	1,150 00	
	F. Lucas	do	1909, Mar. 24.....	1,200 00	
	J. E. Drinkwater	do	1916, May 3.....	1,200 00	
	C. S. Jones	Clerk of Patents	1890, May 22.....	2,050 00	
	W. S. Sutherland	Engrossing Clerk	1902, Jan. 13.....	1,450 00	
	C. E. Burns	Reference Clerk	1900, Apr. 9.....	1,550 00	
	W. Carrell	Engrossing Clerk	1904, Jan. 15.....	1,350 00	
	A. E. Robillard	do	1894, May 8.....	1,100 00	
	A. E. Roe	Clerk of Registers	1909, Mar. 24.....	1,350 00	
	N. MacQueen	Stenographer	1909, Mar. 24.....	800 00	Resigned October 31, 1917.
	M. Bengough	do	1896, Oct. 23.....	800 00	
	J. C. Oram	do	1907, Jan. 16.....	800 00	
	E. F. O'Neill	do	1904, Nov. 9.....	800 00	
	E. G. Halliday	do	1909, Mar. 24.....	800 00	
	B. M. Benson	do	1911, Mar. 3.....	750 00	
	E. Hills	do	1916, May 3.....	750 00	
	G. B. Kirkpatrick	Director	1866, Jan. 29.....	2,700 00	Died August 3, 1917.
	L. V. Rorke	Assistant Director	1909, May 5.....	3,000 00	
	J. Hutcheon	Surveyor and Draughtsman	1913, May 20.....	2,500 00	
	W. F. Lewis	Clerk	1872, Feb. 5.....	1,400 00	

Surveys	D. G. Boyd	Draughtsman	1897, Sept. 27.....	1,750 00
	E. M. Jarvis	Clerk	1904, Oct. 19.....	1,500 00
	J. B. Proctor	do	1897, Jan. 15.....	1,300 00
	B. Rushford	Draughtsman	1912, Oct. 5.....	1,100 00
	F. E. Blanchet	Clerk	1907, Mar. 13.....	1,200 00
	A. Leaman	do	1909, Mar. 24.....	1,200 00
	H. Treeby	Draughtsman	1904, Jan. 13.....	1,350 00
	J. Work	do	1911, Mar. 3.....	1,350 00
	H. M. Kirkland	Stenographer	1904, Nov. 23.....	800 00
	C. O'Connor	do	1911, Mar. 3.....	700 00
Woods and Forests	E. C. Arner	do	1911, Mar. 3.....	700 00
	J. A. G. Crozier	Advisory Chief Clerk	1867, Dec. 1.....	2,300 00
	J. Houser	Chief Clerk	1907, Mar. 13.....	2,000 00
	J. B. Cook	Clerk	1898, Aug. 1.....	1,850 00
	H. Gillard	do	1900, Apr. 9.....	1,600 00
	F. J. Niven	do	1903, Mar. 6.....	1,550 00
	W. F. Trivett	do	1904, Jan. 13.....	1,400 00
	R. H. Hodgson	do	1904, Nov. 23.....	1,300 00
	A. H. O'Neill	do	1909, Mar. 24.....	1,100 00
	G. W. Harris	do	1909, Mar. 24.....	1,100 00
Accounts	N. L. Rogers	do	1911, Nov. 2.....	1,200 00
	S. D. Meeking	do	1910, May 12.....	1,000 00
	E. H. Squire	do	1916, Apr. 6.....	1,000 00
	T. H. Telfer	do	1916, Apr. 6.....	900 00
	C. Rowland	do	1915, Mar. 23.....	800 00
	W. A. Fleming	Stenographer	1915, Feb. 16.....	700 00
	M. E. Bliss	do	1909, Sept. 1.....	800 00
	H. Canton	do	1915, Oct. 9.....	700 00
	D. G. Ross	Accountant	1861, Apr. 15.....	2,650 00
	H. M. Lount	Clerk	1904, Jan. 13.....	1,650 00
Forestry	C. J. Clarke	do	1907, Mar. 13.....	1,250 00
	R. Gordon	do	1913, Apr. 29.....	1,100 00
	W. A. Burritt	do	1908, Apr. 8.....	1,250 00
	C. Bowland	Clerk and Stenographer	1911, Mar. 3.....	800 00
	E. J. Zavitz	Provincial Forester	1912, Nov. 7.....	3,500 00
	J. H. White	Assistant Provincial Forester	1917, Apr. 1.....	3,000 00
	F. S. Newman	Forester	1913, Sept. 22.....	1,700 00
	J. Bald	Stenographer	1914, Oct. 28.....	700 00

Appendix No. 1.—*Concluded.*

Return of Officers and Clerks of the Department of Lands, Forests and Mines for the year ending October 31st. 1917.

Branch.	Name.	Designation.	When Appointed.	Salary per annum.	Remarks.
Colonization	H. A. Macdonell	Director	1912, Feb. 2....	2,450 00	Died September 21, 1917.
	J. Thompson	Clerk	1906, Jan. 24....	1,800 00	
	J. Argue	do	1908, Apr. 8....	1,600 00	
	R. A. Jones	do	1909, Mar. 8....	1,500 00	
	C. W. Garthwaite	do	1910, Nov. 4....	1,200 00	
	H. Tutt	do	1911, Mar. 30....	1,100 00	
	S. O. Dennis	Clerk and Stenographer	1910, Nov. 4....	800 00	
	R. Duggan	Stenographer	1910, Feb. 4....	800 00	
Record Branch	F. R. Dunlop	do	1912, Dec. 17....	725 00	Resigned April 30, 1917. Resigned July 28, 1917.
	B. McDonald	do	1911, Mar. 30....	800 00	
	S. K. Burdin	Chief Clerk	1916, Apr. 6....	2,400 00	
	C. Dies	Clerk	1907, Mar. 13....	1,350 00	
	A. P. Saunders	do	1913, Apr. 30....	1,100 00	
	C. W. St. John	do	1910, Apr. 14....	1,100 00	
	A. Ferguson	do	1916, Apr. 6....	1,100 00	
	W. B. Baines	do	1912, Oct. 5....	1,050 00	
Bureau of Mines	F. Samuels	do	1909, Mar. 24....	1,025 00	Resigned April 30, 1917. Resigned July 28, 1917.
	H. Brophy	Mailing Clerk	1898, Oct. 1....	1,000 00	
	T. W. Gibson	Deputy Minister	1891, June 19....	4,200 00	
	R. D. Fisher	Secretary	1907, Mar. 13....	1,600 00	
	D. H. Barr	Clerk	1907, Mar. 13....	1,350 00	
	F. L. Godson	do	1915, June 18....	1,000 00	
	W. Lemoine	do	1908, Apr. 8....	1,250 00	
	Anne Moffatt	do	1901, Mar. 1....	1,200 00	
D. GEO. ROSS, Accountant.	A. G. Scovell	do	1909, Mar. 24....	1,250 00	Resigned April 30, 1917. Resigned July 28, 1917.
	Ethel Craig	Clerk and Stenographer	1906, May 16....	800 00	
	F. McDougall	do	1907, Mar. 13....	800 00	
	J. L. McNaughton	do	1909, Mar. 24....	800 00	
	H. W. Batchelor	Stenographer	1911, Dec. 19....	750 00	

D. GEO. ROSS,
Accountant.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 2.
List of Agents for the year ending October 31st, 1917.

Name.	Post office address	District or County.	Date of appointment.	Salary per annum.	Remarks.
<i>Land Agents.</i>					
Anderson, T. V.	Hearst.	Part District of Algoma	1913, May	9	
Arthurs, E.	Espanola Mills	do	1915, May	7	
Baker, R. H.	Minden	Part of Victoria	1907, Oct.	1	
Bolger, J. W.	New Liskeard	Lake Temiskaming, District of Nipissing	1913, July	17	
Both, C.	Denbigh	Part of Frontenac and Addington	1905, Oct.	20	
Brown, John	Markstay	Part of District of Nipissing and Sudbury	1916, June	27	
Brown, J. B.	Bracebridge	Muskoka District	1905, July	28	
Burrows, W. A.	Port Arthur	Part District of Thunder Bay	1912, Jan.	30	
Cameron, W.	Stratton Station	do	1911, April	27	
Campbell, I. M.	Parry Sound	do	1914, Nov.	12	
Dempsey, S. J.	Cochrane	do	1911, Feb.	9	
Dodds, T.	Thessalon	do	1915, May	4	
Douglas, W. J.	Maynooth	do	1912, June	12	
Ellis, H. J.	Powassan	do	1909, May	21	
Flesher, H. H.	Massey	do	1916, May	3	
Freeborn, Dr. J. S.	Magnetawan	do	1905, Nov.	10	
Gibson, J. E.	Dryden	do	1914, Nov.	20	
Ginn, F. E.	Matheson	Part District of Nipissing	1912, Mar.	20	
Hales, W.	Apsley	County of Peterborough	1911, July	20	
Hollands, C. J.	Fort Frances	Townplot of Alberta and part District of Rainy River	1892, Oct.	12	
Jenkin, W.	Emisdale	do	1908, July	29	
McFayden, A.	Elmo	do	1905, Sept.	8	
MacLennan, J. K.	Sudbury	do	1905, July	3	
Noble, E.	Sault Ste. Marie	do	1913, Feb.	1	
Parsons, W. J.	North Bay	do	1908, April	1	
Phillion, J. A.	Sturgeon Falls	do	1907, Sept.	13	
Prince, A.	Wilno	do	1905, July	12	
Small, R.	Mattawa	do	1910, June	30	
Spry, W. L.	Kenora	do	1909, Sept.	21	
Teasdale, R. A.	Massey	do	1917, July	1	
Watt, F.	Pembroke	Part of Renfrew	1913, May	28	
					Also Mining Recorder.
					For salary see Homestead Inspectors.
					Resigned June 30th, 1917.

Appendix No. 2.—Continued.

List of Agents for the year ending October 31st, 1917.

Name.	Post office address	District or County.	Date of appointment.	Salary per annum.	Remarks.
<i>Land Agents.—Concluded.</i>					
Whybourne, W. E.	Marksville.	Part of St. Joseph Island	1905, April 7	300 00	
Wilson, A. N.	Kinmount.	Part of Peterborough	1915, June 1	175 00	
Woodlings, J.	Englehart.	Part of District of Nipissing	1908, June 30	700 00	
<i>Homestead Inspectors.</i>					
Barr, J.	Fort Frances	District of Rainy River	1906, Nov. 23	1,200 00	
Bastien, J. A.	Chelmsford	W. part of Sudbury District	1913, May 2	900 00	
Brown, J. B.	Bracebridge	Muskoka District	1905, July 28	1,000 00	Also Crown Land Agent.
Burnes, C. W.	South River	Perry Sound District	1905, Nov. 15	1,000 00	
Crags, W. V.	New Liskeard	S. part of Temiskaming District	1913, Mar. 27	1,200 00	
Dean, T.	Sault Ste. Marie	Algoma District	1908, July 29	800 00	
Hughes, T.	Murillo	Thunder Bay District	1908, July 20	1,000 00	
Poole, E. G.	Porquis Jet.	Part Temiskaming District	1916, Sept. 12	1,200 00	Resigned January 30th, 1917.
Quenneville, I.	Sturgeon Falls	E. part Sudbury and W. part Algoma Districts			
Smith, D.	Cochrane	N. part Temiskaming District	1906, May 7	900 00	
Watson, T. P.	Englehart	Centre part of Temiskaming District	1912, April 16	1,500 00	
Wigle, R. G.	Dryden	Kenora District	1905, May 10	1,200 00	
			1914, May 27	1,200 00	
<i>Timber Agents.</i>					
Brenner, G.	Cochrane	Part Temiskaming and Algoma Districts	1913, May 20	1,800 00	
Christie, W. P.	Perry Sound	Part Perry Sound and Muskoka Districts	1903, Dec. 4	1,600 00	
Darby, E. J.	Ottawa	Part Ottawa District	1889, July 26	1,500 00	
Hawkins, S. J.	Webbwood	Part Algoma and Sudbury Districts	1905, Aug. 16	1,500 00	
Henderson, C.	Sudbury	do	1902, Jan. 1	2,000 00	
Huckson, A. H.	Sault Ste. Marie	Part District of Algoma	1914, April 1	1,600 00	
Johnson, S. M.	Arnprior	Part Ottawa and Perry Sound Districts	1907, Jan. 11	1,600 00	
MacDonald, S. C.	New Liskeard	Part Temiskaming District	1907, June 21	1,700 00	
Margach, W.	Kenora	Kenora District	1889, May 16	1,600 00	
McDonald, H.	Thessalon	Part District of Algoma	1905, April 20	1,500 00	
McDougall, J. T.	North Bay	Nipissing and part Sudbury District	1908, July 8	1,700 00	

Oliver, J. A.	Port Arthur.....	Thunder Bay District	1905, Sept. 30	1,700 00
Stevenson, A.	Peterborough.....	Belleville	1905, Oct. 4	1,500 00
Watts, Geo.	Fort Frances.....	Rainy River District	1910, April 19	1,500 00
Wood, W. G. A.	Porcupine.....	Porcupine District	1917, Feb. 28	1,200 00
<i>Mining Recorders.</i>				
Browning, A. J.	Elk Lake.....	Montreal River Mining Division	1913, July 15	1,100 00
Campbell, C. A.	Sudbury.....	Sudbury Mining Division	1910, Jan. 6	900 00
Gauthier, G. H.	Porcupine.....	Porcupine Mining Division	1912, July 16	1,500 00
Hough, J. A.	Matheson.....	Larder Lake Mining Division	1907, May 22	1,200 00
Miller, N.	Sault Ste. Marie..	Sault Ste. Marie Mining Division	1915, June 9	1,000 00
Morgan, J. W.	Port Arthur.....	Port Arthur Mining Division	1906, Dec. 28	1,000 00
Morgan, M. R.	Tashota.....	Kowkash Mining Division	1916, Mar. 10	900 00
McAulay, N. J.	Haileybury.....	Temiskaming Mining Division	1915, May 8	1,800 00
McQuire, H. F.	Parry Sound.....	Parry Sound Mining Division	1906, Sept. 26	500 0
Sheppard, H. E.	Elk Lake.....	Gowganda Mining Division	1909, Feb. 10	1,000 00
Skill, A.	Elk Lake.....	Montreal River Mining Division	1909, April 1	1,200 00
Spry, W. L.	Kenora.....	Kenora Mining Division	1909, Sept. 21	750 00
<i>Emigration Agents.</i>				
Reid, R.	London.....	England	1913, Feb. 7	5,000 00
Clark, J. M.	London.....	do	1913, Mar. 17	1,800 00

Killed in action, October 29th, 1917.

D. GEO. ROSS,
Accountant.ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 3.

Statement of Lands Sold and Leased. Amount of Sales and Leases and Amount of Collections
for the year ending October 31st, 1917.

Service.	Acres sold and leased.	Amount of sales and leases.	Collection on sales and leases.
<i>Lands Sold:</i>		\$ c.	\$ c.
Agricultural and Townsites.....	109,303.53	78,105 76	63,079 87
Mining	20,154.31	52,985 64	57,054 50
Clergy Lands			976 78
Common School Lands			3,333 59
Grammar School Lands			963 86
University Lands	2,074.73	1,802 37	2,598 91
<i>Lands Leased:</i>			
Mining	4,962.29	4,722*44	16,884 67
Crown	29,068.88	3,245 09	62,845 01
Temagami	64.32	87 00	814 50
	165,628.06	140,948 30	208,551 69

D. GEO. ROSS,
Accountant.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 4.

Statement of Revenue of the Department of Lands, Forests and Mines for the year ending
October 31st, 1917.

Service.	\$	c.	\$	c.	\$	c.
LAND COLLECTIONS.						
<i>Crown Lands:</i>						
Agricultural	58,353	25				
Townsites	4,726	62				
			63,079	87		
Mining Sales			57,054	50		
Clergy Lands	976	78				
Common School Lands	3,333	59				
Grammar School Lands	963	86				
University Lands	2,598	91				
			7,873	14		
<i>Rent:</i>						
Mining Leases	16,884	67				
Crown Leases	62,845	01				
Temagami Leases	814	50				
			80,544	18		
Miners' Licenses	26,732	97				
Permits	850	00				
Recording Fees	34,673	44				
			62,256	41		
<i>Supplementary Revenue:</i>						
Acreage Tax	14,347	99				
Profit Tax	1,503,967	62				
Gas Tax	39,227	76				
			1,557,543	37		
					1,828,351	47
WOODS AND FORESTS.						
Bonus			640,835	35		
Timber Dues			832,467	24		
Ground Rent			100,408	33		
Transfer Fees			6,665	10		
Fire Protection			115,327	06		
					1,695,703	08
Provincial Assay Fees	726	52				
Casual Fees	1,760	89				
Cullers' Fees	112	00				
Forest Reserves Guides' Fees	161	00				
Algonquin Provincial Park	5,615	33				
Quetico Provincial Park	73	00				
			5,688	33		
					8,448	74
REFUNDS.						
Fire Ranging			24,486	35		
Wood Ranging			19,184	93		
Algonquin Park Cleaning Right-of-Way			2,549	60		
Colonization			274	87		
Agents' Salaries			105	00		
Contingencies			60	52		
Mines and Mining			27	50		
Bureau of Mines			4	00		
					46,692	77
					3,579,196	06

D. GEO. ROSS,
Accountant.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 5.

Statement of Receipts of the Department of Lands, Forests and Mines for the year ending October 31st, 1917, which are considered as Special Funds.

Service.	\$ c.	\$ c.
<i>Clergy Lands.</i>		
Principal	413 45	
Interest	563 33	976 78
<i>Common School Lands.</i>		
Principal	1,771 35	
Interest	1,562 24	3,333 59
<i>Grammar School Lands.</i>		
Principal	540 96	
Interest	422 90	963 86
<i>University Lands.</i>		
Principal	2,233 40	
Interest	365 51	2,598 91
		<u>\$7,873 14</u>

D. GEO. ROSS,
Accountant.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 6.

Statement of Disbursements of the Department of Lands, Forests and Mines for the year ending October 31st, 1917.

Service.	\$	c.	\$	c.	\$	c.
AGENTS' SALARIES AND DISBURSEMENTS.						
<i>Land, \$16,861.54.</i>						
Anderson, T. V.	550	00				
Disbursements	21	00				
			571	00		
Arthurs, E.			200	00		
Baker, R. H.	350	00				
Disbursements	6	59				
			356	59		
Bolger, J. W.	800	00				
Disbursements	42	09				
			842	09		
Both, C.			200	00		
Brown, John	500	00				
Disbursements	4	12				
			504	12		
Burrows, W. A.	850	00				
Disbursements	323	35				
			1,173	35		
Cameron, W.	500	00				
Disbursements	37	00				
			537	00		
Campbell, Miss I. M.	500	00				
Disbursements	15	00				
			515	00		
Dempsey, S. J.	800	00				
Disbursements	96	00				
			896	00		
Dodds, T.	400	00				
Disbursements	15	00				
			415	00		
Douglas, W. J.	500	00				
Disbursements	36	46				
			536	46		
Ellis, H. J.			500	00		
Flesher, H. H.			332	00		
Freeborn, J. S.	500	00				
Disbursements	14	70				
			514	70		
Gibson, J. E.	516	60				
Disbursements	165	15				
			681	75		
Ginn, F. E.	700	00				
Disbursements	222	99				
			922	99		
Hales, W.			250	00		
Hollands, C. J.			300	00		
Jenkin, W.	500	00				
Disbursements	8	35				
			508	35		
Carried forward			10,756	40		

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.	\$	c.
<i>Brought forward</i>			10,756	40		
<i>AGENTS' SALARIES AND DISBURSEMENTS.—Continued</i>						
<i>Land.—Concluded.</i>						
McFayden, A.	500	00				
Disbursements	42	25				
			542	25		
MacLennan, J. K.			600	00		
Noble, E.			300	00		
Parsons, W. J.	550	00				
Disbursements	24	00				
			574	00		
Phillion, J. A.	500	00				
Disbursements	22	32				
			522	32		
Prince, A.	500	00				
Disbursements	22	00				
			522	00		
Small, R.	500	00				
Disbursements	23	00				
			523	00		
Spry, W. L.	500	00				
Disbursements	393	40				
			893	40		
Teasdale, R. A.			167	67		
Watt, F.			300	00		
Whybourne, W. E.	275	00				
Disbursements	3	50				
			278	50		
Wilson, A. N.	175	00				
Disbursements	13	00				
			188	00		
Woollings, J.	650	00				
Disbursements	44	00				
			694	00		
<i>Homestead Inspectors, \$16,333.25.</i>						
Barr, J.	1,200	00				
Disbursements	1,095	90				
			2,295	90		
Bastien, J. A.	750	00				
Disbursements	261	66				
			1,011	66		
Brown, J. B.	1,000	00				
Disbursements	236	65				
			1,236	65		
Burnes, C. W.	950	00				
Disbursements	257	99				
			1,207	99		
Cragg, W. V.	1,200	00				
Disbursements	201	65				
			1,401	65		
Dean, T.	700	00				
Disbursements	82	10				
			782	10		
<i>Carried forward</i>			24,797	49		

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.	\$	c.
<i>Brought forward</i>			24,797	49		
<i>AGENTS' SALARIES AND DISBURSEMENTS.—Continued</i>						
<i>Homestead Inspectors.—Concluded.</i>						
Hughes, T.	900	00				
Disbursements	609	10				
			1,509	10		
Poole, E. G.			300	00		
Quenneville, I.	725	00				
Disbursements	459	45				
			1,184	45		
Smith, D.	1,250	00				
Disbursements	886	15				
			2,136	15		
Watson, T. P.	1,100	00				
Disbursements	486	90				
			1,586	90		
Wigle, R. G.	1,100	00				
Disbursements	580	70				
			1,680	70		
<i>Timber, \$32,040.62.</i>						
Bremner, G.	1,499	59				
Disbursements	604	10				
			2,103	69		
Christie, W. P.	1,600	00				
Disbursements	241	71				
			1,841	71		
Hawkins, S. J.	1,500	00				
Disbursements	417	54				
			1,917	54		
Henderson, C.	1,900	00				
Webster, W. A., Assistant	961	00				
Disbursements	299	00				
			3,260	00		
Huckson, A. H.	1,512	00				
Disbursements	222	50				
			1,734	50		
Johnson, S. M.	1,600	00				
Disbursements	131	11				
			1,731	11		
MacDonald, S. C.	1,608	33				
Disbursements	315	83				
			1,924	16		
Margach, W.	1,600	00				
Legris, J., Assistant	1,442	00				
Cunningham, E. A., Stenographer	379	50				
Disbursements	1,265	04				
			4,686	54		
McDonald, H.	1,500	00				
Disbursements	314	97				
			1,814	97		
McDougall, J. T.	1,650	00				
Disbursements	434	93				
			2,084	93		
Oliver, J. A.	1,600	00				
Kytoma, M., Stenographer	436	52				
Porter, M., Stenographer	89	99				
Disbursements	682	45				
			2,808	96		
<i>Carried forward</i>			59,102	90		

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i> .....	.....	59,102 90	
AGENTS' SALARIES AND DISBURSEMENTS.— <i>Concluded</i>			
<i>Timber.—Concluded.</i>			
Stevenson, A.	1,500 00		
Disbursements	471 16	1,971 16	
Watt, G.	1,500 00		
McDonald, A., Assistant	1,338 10		
Disbursements	263 25	3,101 35	
Wood, W. G. A.	800 00		
Disbursements	260 00	1,060 00	
<i>Miscellaneous, \$1,437.10.</i>			
Bilton, G., Caretaker Islands in North and South Crosby		25 00	
Guthrie, W., Caretaker Islands in Devil Lake ..		50 00	
Jamieson, W. K., Caretaker Islands in Dog and Laboria Lakes		50 00	
McArthur, T. A., Inspector of Agencies	675 00		
Disbursements	637 10	1,312 10	
OTTAWA AGENCY.			66,672 51
Darby, E. J., Agent		1,500 00	
Larose, S. C., Clerk		1,000 00	
Rent	700 00		
Disbursements	86 25	786 25	
WOOD RANGING.			3,286 25
Acheson, Ira M.		1,235 00	
Allen, R. A.		705 00	
Arnill, Wm.		1,135 00	
Bailey, Alex.		895 00	
Barrett, Thos.		905 50	
Bates, R.		600 00	
Beaton, C.		445 00	
Bichord, L.		382 50	
Bliss, L. E.	395 00		
Disbursements	45 13	440 13	
Bonhome, S.		193 50	
Bouchard, J.		57 00	
Breman, C.		399 00	
Bromley, T. A.		755 00	
Brown, J. A.		461 00	
Brooks, W. J.		835 00	
Buchan, S.		114 00	
Buchanan, R.		765 00	
Buisson, Wm.		365 00	
Cameron, John K.	205 00		
Disbursements	17 10	222 10	
Carbeil, S.		307 50	
Castonguay, A. C.		1,020 00	
Charlebois, P.		1,014 00	
Chenier, D. A.		1,608 50	
Chenier, G. T.		360 00	
Clairmont, E.		508 00	
Clapson, H.		108 75	
<i>Carried forward</i> .....	.....	15,836 48	69,958 76

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>	15,836 48		69,958 76
<i>WOOD RANGING.—Continued.</i>			
Clarke, W. R.	38 50		
Close, R. J.	667 25		
Cloud, Wm.	177 00		
Connelly, Dan	1,565 00		
Comer, B. F.	544 00		
Corrigan, R. T.	1,100 00		
Cowchroski, A.	292 50		
Coyne, P.	750 00		
Cross, R. J.	516 00		
Crowley, C.	42 00		
Dawkins, J. J.	44 00		
Dennie, F. J.	450 00		
Dickson, C.	57 00		
Didier, H.	740 00		
Doxse, J. E.	1,070 00		
Dunn, Wm.	78 75		
Dunn, J. F.	705 00		
Durrell, Wm.	945 00		
Duval, C. A.	410 00		
Dyson, I.	159 00		
Eakins, W.	66 00		
Eaton, James	240 00		
Eldridge, R.	448 00		
Emlaw, O.	900 00		
Emond, A.	348 00		
Fairburn, N. H.	755 00		
Ferguson, E. A.	835 00		
Fisher, Geo.	770 00		
Fitzback, J.	207 00		
Fletcher, N.	715 00		
Foster, W. G.	384 00		
Fraser, D.	260 00		
Fraser, W. A.	645 00		
Frechette, O.	42 00		
Ganton, D.	715 00		
Gardner, Wm.	408 00		
Gill, Chas.	480 00		
Hagan, E. G.	885 50		
Haines, B.	504 75		
Hamilton, R.	189 00		
Hart, Isaac	658 00		
Hartley, Chas.	1,177 50		
Disbursements	3 50		
Harvey, J.	1,181 00		
Hauralty, P.	42 00		
Hawkins, Wm.	742 25		
Hawkins, Wm.	424 00		
Henderson, Chas. Disbursements	508 07		
Henderson, John	61 75		
Henderson, A. E.	1,165 00		
Henderson, L. E.	1,195 00		
Hey, Ben	480 00		
Hoff, J. S. M.	829 50		
Hornick, Geo.	57 00		
Huckson, A. H. Disbursements	1,086 95		
Huckson, E.	979 50		
Hurdman, W. H.	775 00		
Hutton, John	1,130 00		
Jamieson, J.	544 00		
<i>Carried forward</i>	47,843 75		69,958 76

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		47,843 95	69,958 76
<i>WOOD RANGING.—Continued.</i>			
Jeroux, A.		140 00	
Johnson, C.		423 75	
Jones, W.		452 00	
Kernahan, G. A.		528 00	
King, Sam.		195 00	
Labree, Paul.		502 50	
Laframbois, E.		236 00	
Lamon, Wm.		745 75	
Lapointe, Jas.		72 00	
Lee, J. B.		765 00	
Lepage, L.		623 25	
Leishman, E.		722 50	
Leroy, L. H.		519 50	
Lilevre, Joe.		399 00	
Linklater, Geo.		1,209 50	
Little, T.		528 00	
Long, H. E.	480 00		
Disbursements	37 51		
		517 51	
Lowe, Wm.		252 00	
MacDonald, S. C. Disbursements		15 90	
Macdonnell, R. D.		680 00	
Mahoney, Thos.		82 50	
Manice, Wm.		1,177 50	
Margach, J. A.		810 00	
Margach, Wm. Disbursements		3,004 83	
Marr, H. S.	572 00		
Disbursements	2 30		
		574 30	
Maughan, Jos. Disbursements		30 70	
Menzies, Alex.	1,698 50		
Disbursements	139 02		
		1,837 52	
Mercier, Ed.		329 25	
Miller, J. A.		120 00	
Milway, J. H.		704 75	
Minty, A.		131 25	
Molyneaux, Geo.		650 00	
Moody, L.		850 00	
Mooney, L.	1,580 50		
Disbursements	248 18		
		1,828 68	
Moore, Joseph.		36 00	
Moran, A.		1,430 00	
Morel, A.		452 50	
Morel, H.		704 00	
Murray, John.		677 00	
Murray, Earl.		48 75	
Murray, James.		155 25	
Murray, Thos.		855 50	
Murray, Wm.		1,295 00	
McAulay, W. D.		665 00	
McCaw, J. G.	1,430 00		
Disbursements	8 55		
		1,438 55	
McCaw, J. E.		950 00	
McCuaig, J. A.		172 50	
McCuaig, R.		137 75	
McDonald, T.		800 00	
McDonald, J. D.		1,430 00	
McDonald, Hector. Disbursements		15 00	
<i>Carried forward</i>		80,764 99	69,958 76

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		80,764 99	69,958 76
WOOD RANGING.— <i>Continued.</i>			
McDougall, J. T. ....Disbursements		94 63	
McFarlane, J. A.		131 25	
McFarlane, A.		126 50	
McGillivray, D. D.		412 00	
McGregor, Wm.		4 00	
McGuire, P.		276 00	
McGuire, C.		525 00	
Melvor, J. A.		1,144 00	
McKee, Wm.		258 75	
McKendry, W. B.		750 00	
McLay, A.		240 00	
McLaughlin, John		343 50	
McLean, John	1,470 00		
Disbursements	147 05		
		1,617 05	
McManemun, C.		11 50	
McNabb, Alex.		885 00	
McPherson, J. S.		1,430 00	
Naponse, M.		292 50	
Nault, J.		504 00	
Nepham, D.		399 00	
Nelson, P.		214 50	
Niblet, James		1,250 00	
Nicoll, Geo.		7 50	
Nolan, H.		138 75	
Oliver, J. A. ....Disbursements		178 31	
Paulen, C.		140 00	
Peiton, F.		166 75	
Pigott, John		505 00	
Rae, A.		57 00	
Reid, John		900 00	
Ridley, R.		1,260 00	
Ritchie, John F.		820 00	
Ross, Sidney		1,242 75	
Ryan, James		488 00	
Shaw, Alfred		957 50	
Shaw, D.		544 00	
Sharp, James		675 00	
Shewfelt, Alfred		168 75	
Short, J.		560 00	
Simpson, Wm.		1,430 00	
Smith, Geo.		166 25	
Smith, J. D. C.		592 00	
Snyder, F.		435 75	
Spavin, John		765 00	
Spence, D.		1,578 50	
Spofford, Thos.		565 50	
Squires, J.		142 50	
Stein, P.	1,129 25		
Disbursements	35 37		
		1,164 62	
Stewart, D.	1,405 00		
Disbursements	40 35		
		1,445 35	
Stewart, T. F.		412 00	
Talouse, B.		3 00	
Thompson, W. B.		1,195 00	
Tichborne, H. C.		460 00	
Urquhart, A.		775 00	
Vanderberg, N.		829 00	
Vanslyke, J.		565 25	

Carried forward 113,008 20 69,958 76

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		113,008 20	69,958 76
WOOD RANGING.— <i>Concluded.</i>			
Vincent, H. T.		1,030 00	
Washburn, J.		171 00	
Watts, Fred.		480 00	
Webster, W. A. Disbursements		71 25	
Whelan, P. J.		1,430 00	
Willan, Wm.		345 00	
Wilson, D.		840 00	
Wilson, C.		159 00	
Windle, James		471 50	
Wylie, B. M.		60 00	
Yeomans, James		1,276 50	
Young, J. J.		99 75	
Young, R. J.		710 00	
			120,152 20
FIRE RANGING.			
Abraham, Mike		57 50	
Abrey, Joseph		300 00	
Adair, R. A.		71 50	
Adams, Alex.		335 00	
Agnew, Wm.		270 00	
Alcock, F.		147 50	
Allen, R. A.		840 00	
Allen, Wm.		22 50	
Amelonap, J.		16 25	
American Tent and Awning Co. Supplies		220 35	
Anderson, M.		302 50	
Armstrong, B.		252 00	
Armstrong, W. H.		345 00	
Archambault, G.		374 00	
Ashby, L.		320 00	
Atkins, C.		330 00	
Atkinson, B.		312 50	
Bailey, H.		453 75	
Baonatos, M.		237 50	
Barrie, T.		376 75	
Barry, C.		305 00	
Bartlett, Geo. W. Disbursements		41 50	
Bartrand, I.		257 50	
Bates, R.		352 00	
Bayne, J. O.		387 50	
Beach, F. C.		217 50	
Beaudry, M.		317 50	
Beauvis, James		305 00	
Beauvis, P.		322 50	
Bedard, I.		347 50	
Bedford, H.		272 50	
Begley, Wm. P.	180 00		
Disbursements	20 57		
		200 57	
Behaniell, Geo.		325 00	
Belanger, B.		20 00	
Belcher, E. D.		330 00	
Bell, H.		156 75	
Bellefull, O.		365 00	
Belton, Wm. J.		347 50	
Benard, D.		471 00	
Benn, H. F.		345 00	
Berg, A.		205 00	
Bergeron, J.		260 00	
Berigan, S.		110 00	
<i>Carried forward</i>		11,846 42	190,110 96

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		11,846 42	190,110.96
<i>FIRE RANGING.—Continued.</i>			
Berigan, D.		110 00	
Berlinquette, J.		346 50	
Bevan, T. W.		315 00	
Bezeau, U.		212 50	
Bird, John		345 00	
Bishop, F.		287 50	
Bisson, A.		290 00	
Blair, Geo.		25 00	
Blake, H.		338 25	
Blanchett, O.		112 50	
Blaski, F.		322 50	
Bliss, L. E.	1,974 28		
Disbursements	2,712 22		
		4,686 50	
Boivin, J.		317 50	
Boland, Wm.		330 00	
Boldt, A.		345 00	
Bolger, P. W.		285 00	
Bolsley, Frank		150 00	
Bonhome, L.		290 00	
Bookout, H. B.		320 00	
Boorze, A.		182 50	
Boorze, R.		182 50	
Booth, J. R.		49 50	
Bossie, R.		40 00	
Both, Alfred		352 50	
Both, Albert		377 50	
Bottrell, D.		315 00	
Boucher, C.		357 50	
Boucher, S.		225 50	
Boucher, J.		92 50	
Bouchard, E.		142 50	
Bouchard, A.		127 50	
Boudat, F.		152 50	
Bourbonnais, A.		285 00	
Bourdegnon, F.		57 75	
Bowers, Geo.		330 00	
Bowins, John		17 50	
Bowland, J. J.	860 00		
Disbursements	943 28		
		1,803 28	
Bowman, Theo.		280 00	
Bowles, J.		332 50	
Boyce, B.		327 25	
Boyd, John		347 50	
Boyd, J. F.		282 50	
Boys, John		290 00	
Bradley, W. E.		280 00	
Bradley, J.		324 50	
Branconnier, J.		120 00	
Brazzel, Robt.		230 00	
Breen, Geo.		322 50	
Brennan, Guy		190 00	
Brennan, G.		255 00	
Brennan, R. L.		357 50	
Bromley, E. H.		342 50	
Bromley, C.		231 00	
Brooks, W.		320 00	
Brown, John		307 50	
Brown, T. E.		337 50	
<i>Carried forward</i>		31,843 95	190,110.96

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		31,843 95	190,110 96
<i>FIRE RANGING.—Continued.</i>			
Brown, Aug.		312 50	
Brown, Thos.		195 00	
Brown, Geo.		352 00	
Brown, H.		280 00	
Brownlee, J. J.		24 75	
Bruce, John		282 50	
Brum, A. W.	805 00		
Disbursements	165 15		
		970 15	
Buckingham, Geo.		343 25	
Bunting, H. T.		320 00	
Burgess, R.		235 00	
Burk, John		340 00	
Burk, T.		7 50	
Burkman, C.		382 50	
Burleigh, J.		305 00	
Burns, J.		295 25	
Burnes, Fred.		292 50	
Bruette, F.		97 50	
Byrne, H.		22 50	
Byrne, J.		245 00	
Byrnes, J.		257 50	
Cadere, H.		387 50	
Cahill, B.		327 50	
Calderwood, S.		115 00	
Caldwell, C.		277 50	
Cameron, N. A.		322 50	
Cameron, W. H.		302 50	
Cameron, Geo.		100 00	
Campbell, W. A.		462 00	
Campbell, R. A.		345 50	
Campbell, T. J.		345 00	
Campbell, A.		310 00	
Campbell, T. S.		176 00	
Campbell, D.		345 00	
Campbell, Wm.		572 00	
Campbell, Geo.		312 50	
Campbell, Ira		180 00	
Campbell, S.		127 50	
Campbell, Wesley		187 50	
Canore, Joseph		220 00	
Canton, C.		65 00	
Carmichael, T.		350 00	
Carnochan, Geo.		367 50	
Carrier, C.		165 00	
Carson, S.		122 50	
Case, Geo.		325 00	
Caslick, Wm.		217 50	
Caswell, G.		192 50	
Caswell, Ed.		382 50	
Caswell, R.		350 00	
Causley, N.		362 50	
Cellery, A.		82 50	
Chaffey, Wm.		360 00	
Chamberlain, H.		302 50	
Chapman, C. N.		300 00	
Charette, N.		237 50	
Charette, S.		307 50	
<i>Carried forward</i>		47,309 85	190,110 96

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		47,309 85	190,110 96
<i>FIRE RANGING.—Continued.</i>			
Charron, J.		375 00	
Chase, J.		270 00	
Chenier, R.		142 50	
Chenier, G. T.		148 50	
Chief, T.		150 00	
Chief, J.		130 00	
Child, H.		245 00	
Christie, W. P. Disbursements ..		467 54	
Church, I.		5 00	
Clairmont, H.		367 50	
Clark, W. R.	405 00		
Disbursements	967 59		
		1,372 59	
Clark, H.		349 25	
Clery, J.		321 75	
Clegg, R.		315 00	
Cliff, W.		277 50	
Coady Bros. Equipment ..		500 00	
Cochrane, H. D.		347 50	
Coghlan, Thos.		387 50	
Coghlan, J. S.		325 00	
Coleman, E. J.		267 50	
Coleman, D.		147 50	
Commerand, Joe		290 00	
Connell, Wm.		451 00	
Conroy, Ed.		280 00	
Conwav, R.		390 00	
Cook, E.		352 50	
Cook, Wm.		72 50	
Cooke, Wm.		210 00	
Cooper, Thos.		572 00	
Costello, H.		222 50	
Costello, H.		332 50	
Cotie, Fred		215 00	
Cottam, J. T.		275 00	
Cotte, H.		231 00	
Cottenham, W.		390 00	
Cox, Jos.		367 50	
Coyne, P.	765 00		
Disbursements	172 07		
		937 07	
Craig, John		327 50	
Cramorday, J.		16 25	
Crateau, C.		275 00	
Creswick, H. H.		320 00	
Critchley, P.	26 25		
Disbursements	5 00		
		31 25	
Crosbie, W. J.		312 50	
Cryderman, N.		56 00	
Culhane, John	392 50		
Disbursements	49 26		
		441 76	
Culhane, A.		282 50	
Culhane, D.		220 00	
Cullen, M. T.		510 50	
Cullen, W. F.		253 00	
Cullin, A. E.		265 00	
<i>Carried forward</i>		63,121 81	190,110 96

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.	\$	c.
<i>Brought forward</i>			63,121	81	190,110	96
<i>FIRE RANGING.—Continued.</i>						
Cunoy, R.			231	00		
Currie, F.			72	00		
Curtin, D.			347	50		
Curtis, John			357	50		
Dagg, A.			332	50		
Dagnis, E.			82	50		
Dambremont, F.			230	00		
Dane, Alfred			347	50		
Darby, Wm.			572	00		
Davidson, J.			99	00		
Davidson, John			332	50		
Davis, Thos.			302	50		
Dawe, Wm.	129	00				
Disbursements	21	60				
			150	60		
Dawkins, J. J.			377	50		
Dean, A.			317	50		
Dear, A.			67	50		
Dennie, M.			257	50		
Dennie, F. J.	905	00				
Disbursements	186	01				
			1,091	01		
Dennison, H.			387	50		
Derocher, S.			170	00		
Dischamp, F.			320	00		
Desjardine, F.			357	50		
Deslauriers, E.			255	00		
Dessermean, J.			195	00		
Dickson, R. N.			320	00		
Dimond, P.			100	00		
Dobie, Thos.			127	50		
Dodds, G.			325	00		
Dodds, W. H.			354	75		
Dodds, Thos.			357	50		
Donaldson, C.			347	50		
Donta, Jos.			347	50		
Douchime, S.			165	00		
Douchime, D.			162	50		
Douglas, J. R.			342	50		
Dourin, James			260	00		
Dowd, H. L.			346	50		
Dowdall, D.			112	50		
Doyle, James			342	50		
Dube, F.			305	00		
Dubois, A. L.			307	50		
Duke, D.			212	50		
Dulmage, J.			20	00		
Dunbar, James			322	50		
Dunn, J. O.			280	00		
Dupine, H.			397	50		
Dupuis, E.			357	50		
Duquette, H.			317	50		
Durnin, C.	160	00				
Disbursements	9	00				
			169	00		
Durocher, F.			90	00		
Durrell, John			165	00		
Durrell, D.			295	00		
<i>Carried forward</i>			77,625	17	190,110	96

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.	\$	c.
<i>Brought forward</i>			77,625	17	190,110	96
<i>FIRE RANGING.—Continued.</i>						
Durrell, L.			148	00		
Dusang, A.			556	50		
Duval, C. A. Disbursements.			22	19		
Edwards, J. K.			305	00		
Elliott, W. J.			360	00		
Elliott, Jackson			327	50		
Elliott, Frank	612	00				
Disbursements	23	20				
			635	20		
Elliott, Wm.			302	50		
Elliott, C. H.			325	00		
Ellis, E. C.			337	50		
Ellsworth, C. B.			320	00		
Emes, H.			382	50		
Evans, W. J.	995	00				
Disbursements	1,525	65				
			2,520	65		
Fahey, R.			283	75		
Fairburn, N.			52	50		
Fairman, Wm.			14	00		
Favell, F.			65	00		
Favreau, Geo.			342	50		
Ferguson, T. H.	588	00				
Disbursements	3	32				
			591	32		
Ferguson, Frank			342	50		
Ferguson, A.			345	50		
Ferguson, J. R.			150	00		
Ferguson, Geo.			342	50		
Ferris, R.			88	00		
Fillion, D.			147	50		
Findlay, James			217	50		
Finlayson, H.			246	75		
Finlayson, N.			290	00		
Finlayson, J. H.			390	00		
Fisher, Geo.			765	00		
Fitzgerald, James			322	50		
Fitzpatrick, E.			157	50		
Flack, A.			319	00		
Flaherty, John			347	50		
Fletcher, N. B.	528	00				
Disbursements	41	35				
			569	35		
Flynn, J.			126	50		
Foard, F.			212	50		
Fontaine, M.			302	50		
Ford Motor Co. Trucks.			2,445	00		
Forman, A.			337	50		
Fortin, J. F.			242	50		
Foster, H.			213	50		
Foulie, W. J.			265	00		
Fox, J.			374	00		
Foy, Wm.			260	00		
Fox, E.			50	00		
Francois, J.			390	00		
Fraser, Ben.			347	50		
Fraser, Peter			342	50		
Fraser, W. A.			367	50		
<i>Carried forward</i>			96,834	38	190,110	96

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		96,834 38	190,110 96
<i>FIRE RANGING.—Continued.</i>			
Fraser, Gordon		342 50	
Frechett, Bap.		357 50	
Frenette, L.		87 50	
Fritchett, O.		277 50	
Furlong, J.		280 00	
Furlong, Wm.		382 50	
Gagne, F.	835 00		
Disbursements	555 73		
		1,390 73	
Gagnon, Paul		277 50	
Gagnon, Joe		198 00	
Gagnon, Alex.		340 00	
Gagnon, N.		387 50	
Gallow, J.		312 50	
Galvin, G.		302 50	
Gamble, J. M.		175 00	
Gamble, Wm. M.		317 50	
Gammond, Geo.		295 00	
Gardner, F.		257 50	
Garneaux, P.		45 00	
Garrow, J.		177 50	
Gartshore, M.		347 50	
Gauthier, E. P.		57 75	
Gault, J.		330 00	
Gault, R.		363 00	
Gauthier, P.		137 50	
Gauthier, Theo.		150 00	
Geddion, James		77 50	
Gemmill, John	805 00		
Disbursements	539 09		
		1,344 09	
Genereaux, S.		282 50	
Gervais, F. H.		335 00	
Gervais, Ferd.		335 00	
Gibbons, O.		349 25	
Gellanders, Geo.		160 00	
Gillon, Bert.		195 25	
Gillon, Roy		167 75	
Gilmour, T.		297 50	
Gleison, W.		150 00	
Glover, R.		145 00	
Godin, T. H.		120 00	
Godin, P.		130 00	
Godin, E.		320 00	
Godmanson, L.		310 00	
Gomme, P.		39 00	
Gongeon, A.		250 00	
Gordon, Alfred		357 50	
Gorman, D.		343 00	
Graham, J.		150 00	
Graham, James		354 75	
Grant, A.		180 00	
Grawberger, T. J.		322 50	
Grev, A. H.		305 00	
Grills, D.		264 00	
Groome, L.		357 50	
Groulx, Chas.		247 50	
Groulx, Joe		345 00	
<i>Carried forward</i>		112,658 45	190,110 96

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		112,658 45	190,110 96
<i>FIRE RANGING.—Continued.</i>			
Groulx, A., Sr.		345 00	
Groulx, A., Jr.		360 00	
Gudgeon, J.		52 50	
Guilbault, A. T.		320 00	
Gunn, H.		260 00	
Gunter, R. H.		367 50	
Gunter, J.		342 50	
Guthrie, Wm.		315 00	
Gutoskie, A.		92 50	
Hackenbruck, M.		280 00	
Hagan, C.		367 50	
Hagarty, Jerry		397 50	
Haldane, F.		315 00	
Haley, Ed.		347 50	
Hall, G.		262 50	
Hall, F.		147 50	
Hall, J.		192 50	
Hall, Thos.		345 75	
Halley, L.		257 50	
Halliday, J.		305 00	
Hamilton, J. R.		345 00	
Hamilton, James		322 50	
Hamilton, F.	785 00		
Disbursements	823 04		
		1,608 04	
Hamon, F.		342 50	
Hand, T.	880 00		
Disbursements	740 15		
		1,620 15	
Hanmer, J.		240 00	
Hannan, J. W.		105 00	
Hanrahan, D.	665 00		
Disbursements	905 70		
		1,570 70	
Hanson, L.		105 00	
Harney, S.		316 25	
Harris, C.		184 25	
Harrison, G.		285 00	
Harrison, W.		350 00	
Harrison, D.		317 50	
Harvie, A.		305 00	
Haskins, Wm.		312 50	
Haskins, J.		137 50	
Hass, G.		262 50	
Hass, G. J.		347 50	
Hastings, John		385 00	
Hatch, A. L.		105 00	
Hawkins, G. M.		55 00	
Hawley, P.		165 00	
Hayes, C.		257 50	
Hayes, S.		290 00	
Hazard, Geo.		120 00	
Hebert, J.		180 00	
Heggart, Chas.		345 00	
Henderson, J.		362 00	
Hennessey, B. E.		170 50	
Hennessey, M. J.		257 50	
Henson, W.		235 00	
<i>Carried forward</i>		130,336 09	190,110 96

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		130,336 09	190,110 96
FIRE RANGING.—Continued.			
Herbert, J.		280 00	
Herron, A.		170 00	
Heslip, C.		375 00	
Hey, Ben		815 00	
Hickley, J. L.	493 00		
Disbursements	257 85		
		750 85	
Higgins, J. R.		245 00	
Hill, Chas.		57 50	
Hogan, J.		330 00	
Hogan, P.		335 00	
Holmes, G.		435 00	
Hooper, F. T.		127 50	
Hooper, W. A.		332 50	
Hopkins, R. D.		195 00	
Horne, J. M.		343 75	
Horner, Ed.		220 00	
Hornick, Geo.		352 50	
Huckson, A. H.	Disbursements.	99 76	
Hugham, J. M.		42 50	
Hume, O. B.		342 50	
Hunn, W.		357 50	
Hunter, Wm.		290 00	
Hunter, L.		262 50	
Hurdman, W. H.	705 00		
Disbursements	95 65		
		800 65	
Irwin, Thos.		317 50	
Isbister, J. A.		349 25	
Jackman, H.		27 00	
Jackson, J. E.		50 00	
Jacob, M.		72 50	
Jarvis, J.		324 50	
Jenkin, S.	718 50		
Disbursements	504 50		
		1,223 00	
Jenson, A.		80 00	
Jerrett, E. L.		337 50	
Jewell, James		272 50	
Jewell, F.		330 00	
Jewell, F.		335 00	
Jocko, P.		331 25	
Johnson, Wm.		451 00	
Johnson, A.		203 50	
Johnson, F.	320 00		
Disbursements	160 00		
		480 00	
Johnson, R.		3 50	
Johnson, G. S.		335 00	
Johnson, David		19 25	
Johnson, W.		142 50	
Johnston, John		367 50	
Johnston, T. J.		374 00	
Jolicoure, P.		214 50	
Jonas, A.		125 00	
Jones, C. E.		312 50	
Keeler, G. H.		285 00	
Keeley, C. A.		350 00	
<i>Carried forward</i>		145,609 35	190,110 96

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>	145,609 35	190,110 96
<i>FIRE RANGING.—Continued.</i>			
Keller, D. F.	255 75	
Kelley, Robt.	366 50	
Kelly, T.	345 00	
Kelly, Geo.	315 00	
Kemp, Wm.	312 50	
Keenahan, M.	342 50	
Kennedy, Robt.	347 50	
Kennedy Hardware Co.	Supplies ..	73 44	
Kenrvorst, W. H.	47 50	
Keon, M.	198 00	
Keon, T.	17 50	
Kerr, Robt.	488 00	
Kewais, Wm.	302 50	
Kewais, Jacob	317 50	
Kiley, M.	280 00	
King, A.	145 75	
King, Robert	382 50	
King's Printer	Supplies ..	2,131 78	
Kingston, T. H.	382 50	
Kingston, T. J.	382 50	
Kipling, G.	242 00	
Kirby, John, Sr.	305 00	
Kirby, John, Jr.	347 50	
Kirkhane, Lawrence	162 50	
Kirton, Wm.	362 50	
Kistabish, Frank	280 00	
Kitchen, James	377 50	
Kitchen, J.	257 50	
Kowalski, Chas.	242 50	
Krock, L. A.	207 50	
Kunkel, Frank	258 00	
Labine, Emile	220 00	
Labine, John	332 50	
LaBrash, J.	272 50	
LaBrash, James	280 00	
Lachance, M.	142 50	
Laclaire, W.	162 50	
Laffin, Bert	78 00	
Lofquest, M.	345 00	
Lagrow, G. W.	337 50	
Laidlaw, H.	357 50	
Laird, L. A.	50 00	
Laird, Peter	347 50	
Lalonde, Fred.	330 25	
Lamb, Joe	77 50	
Lamieux, N.	87 50	
Lamourieux, A.	295 00	
Lance, F.	332 50	
Landry, Amer.	87 50	
Landry, John	322 50	
Langford, Thos.	342 50	
Langtree, John	345 00	
Langevain, Wm.	122 50	
Laplante, B.	50 00	
LaRose, Louis	257 50	
Laroux, J.	242 50	
<i>Carried forward</i>	161,904 32	190,110 96

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		161,904 32	190,110 96
<i>FIRE RANGING.—Continued.</i>			
Larwell, O.		382 50	
Laundry, Peter		260 00	
Lavigne, A.		117 50	
Lavoie, X.		347 50	
Lawrence, S.		350 00	
Leblanc, O.	556 00		
Disbursements	52 40		
		608 40	
LeBlanc, J.		325 00	
LeClaire, H.		280 00	
Lee, E. J.		347 50	
Lee, J. C.	601 00		
Disbursements	137 63		
		738 63	
Lee, J. B.	800 00		
Disbursements	198 87		
		998 87	
Lefebure, J.		357 50	
Lefrany, D.		3 75	
Legg, S.		57 50	
Legris, Thos.		347 50	
Legris, J. Disbursements		6,365 14	
Legris, H. M.		345 00	
Lemieux, F.		87 50	
Leonard, T.		347 50	
Leroy, L.	860 00		
Disbursements	1,174 00		
		2,034 00	
Lerwill, R.		307 50	
Leslie, E.		18 00	
Leudolph, B. H.	150 00		
Disbursements	10 69		
		160 69	
Liddicotte, Thos. L.		450 50	
Lileore, J.		132 50	
Lilley, D.		50 00	
Lillico, A. L.		317 50	
Linch, M.		123 75	
Livingston, John		353 00	
Logambre, P.		220 00	
Looney, John		357 50	
Lortie, E.		24 75	
Lothian, D. R.		139 00	
Love, F.		272 50	
Lovering, J. E.		317 50	
Lonwes, R. G.		310 00	
Ludford, F.		252 00	
Ludgate, John		129 25	
Luke, A.		73 90	
Lumb, John		370 00	
Lumb, J. C.		272 50	
Lundy, M. F.		342 50	
Lupeen, J.		59 50	
Lyle, J.		125 00	
Lynch, John		183 00	
MacDonald, C.		77 50	
MacDonell, L. P.		350 00	
Macdonell, R. D.		765 00	
<i>Carried forward</i>		183,160 45	190,110 96

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		183,160 45	190,110 96
<i>FIRE RANGING.—Continued.</i>			
MacGregor, W. H.	890 00		
Disbursements	632 76		
		1,522 76	
Mackie, H.		283 25	
MacNeil, J. A.		342 50	
MacPhee, A. L.		110 00	
Martin, W.		60 75	
Magher, Geo.		302 50	
Mallon, J.		140 00	
Maloney, J.		182 50	
Marcourt, P.		255 00	
Margach, Wm. Disbursements.		59 36	
Margach, J. A.		552 00	
Marsh, Ed.		340 00	
Martin, Ed.		357 50	
Martin, T.		302 50	
Martin, T.		357 50	
Martin, A. L.		340 00	
Mason, Geo.		382 50	
Mason, G.		202 50	
Matheson, R.		167 75	
Mattice, J. H.		270 00	
Mawhinney, G. S.		307 50	
May, H.	730 00		
Disbursements	40 25		
		770 25	
Merchant, John		357 50	
Merkley, J. C.		240 00	
Messervier, T.		255 00	
Mickelson, John		307 50	
Middlebrook, J. N.		302 50	
Millar, R.		320 00	
Millichamp, T.		177 50	
Mills, W. E.		345 00	
Milway, J. H.	830 00		
Disbursements	1,002 39		
		1,832 39	
Minker, T.		220 00	
Minnawasin, P.		250 25	
Mitchell, P.		370 00	
Mitter, M.		162 50	
Moffatt, J.		382 50	
Molyneaux, Geo.	805 00		
Disbursements	1,130 12		
		1,935 12	
Mongrain, C.		96 00	
Montgomery, R.		231 50	
Montgomery, W. R.		307 50	
Montreuil, E.		245 00	
Montreuil, L.		382 50	
Montreuil, J. J.		317 50	
Moir, A.		322 50	
Moody, H. C.		317 50	
Moore, R.		272 50	
Moore, S.		127 50	
Moore, A. S.		357 50	
Moore, J. V.		345 00	
Moore, P.		220 00	
<i>Carried forward</i>		201,769 33	190,110 96

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		201,769 33	190,110 96
<i>FIRE RANGING.—Continued.</i>			
Moorhead, R.		280 00	
Morel, H.		315 00	
Morgan, Geo.	584 00		
Disbursements	41 80		
		625 80	
Morgan, F.		315 00	
Morgan, C.		52 25	
Moriarty, M.		345 00	
Moriarty, E.		107 50	
Morin, J.		330 00	
Morin, J.		357 50	
Morin, J.		327 25	
Morin, J.		280 00	
Morriseau, F.		198 00	
Morrison, J.		69 00	
Morrison, J.		180 00	
Morrison, J.		312 50	
Morton, Geo.		322 50	
Mosse, H.		172 50	
Moxam, V. R.		60 00	
Mucklinberry, T.		380 00	
Mullin, W. R.		365 75	
Murphy, J.		345 00	
Murrach, P.		77 50	
Musquatish, H.		322 50	
McAdam, J.		390 00	
McArthur, Wm.		312 50	
McAulay, W. D.	855 00		
Disbursements	775 42		
		1,630 42	
McBain, R.		312 50	
McCann, L.		322 50	
McCaw, Wesley		347 50	
McCaskill, S.		299 25	
McClelland, D. W.		280 00	
McColl, H.		347 50	
McCool, J.		42 50	
McCormick, P.		335 50	
McCormick, T.		377 50	
McCoy, C. L.		267 50	
McCreight, A.		357 50	
McCrindle, I.		257 69	
McCullough, D. J.		230 00	
McCulloch, T.		235 00	
MCurrach, Jas.		305 00	
McDermid, A.		267 50	
McDermott, W. H.		77 50	
McDonald, H.	Disbursements	1,281 47	
McDonald, Archie		52 50	
McDonald, Alex.		294 25	
McDonald, F.		305 00	
McDonald, F.		317 50	
McDonald, J.		308 00	
McDonald, T.		580 00	
McDonald, J. R.		279 50	
McDonald, D. R.		310 00	
McDonald, G.		99 00	
<i>Carried forward</i>		218,732 46	190,110 96

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.	\$	c.
<i>Brought forward</i>			218,732	46	190,110	96
<i>FIRE RANGING.—Continued.</i>						
McDonald, J.			282	50		
McDonald, J.			235	00		
McDonald, Wm.			302	50		
McDonald, B.			142	50		
McDonald, J.			315	00		
McDonald, Allan	155	00				
Disbursements	1,584	38				
			1,739	38		
McDonald, A. J.	1,350	00				
Disbursements	3,806	16				
			5,156	16		
McDonnell, John			17	50		
McDougall, J. T. Disbursements			427	76		
McDougall, C.			354	75		
McFarland, J.			312	50		
McFarlane, J. A.			327	50		
McFarlane, W.			332	50		
McGauley, R.			202	50		
McGaw, Capt.			260	00		
McGee, H.			287	50		
McGee, John			255	00		
McGhie, Chas.			265	00		
McGraw, L.			71	50		
McGregor, J. A.			347	50		
McGowan, T.	795	00				
Disbursements	1,934	07				
			2,729	07		
McHughen, John			305	00		
McInnes, C.			389	75		
McIntosh, P.			5	00		
McIvor, A.			255	00		
McKechnie, J. A. Disbursements			165	18		
McKee, Ed.			122	50		
McKee, Thos.			382	50		
McKendry, W. B.			390	00		
McKenna, T.			280	00		
McKenna, P.			240	00		
McKenzie, Alex.			342	50		
McKenzie, J.			357	50		
McKinnon, T.			10	00		
McKinnon, H.			330	00		
McLaren, J.			382	50		
McLean, D.			330	00		
McLeod, E. H. Disbursements			55	27		
McLeod, B.			71	50		
McLeod, P.			71	50		
McLeod, J. A.			360	25		
McLeod, J.			63	25		
McMahon, A.			322	50		
McNally, B.			339	50		
McNee, G.			327	25		
McNee, E. D.			178	75		
McPhail, H.			320	00		
McRae, Alex.			227	50		
McQuestion, V.			312	50		
Narvanen, K.			5	00		
Nault, James	636	00				
Disbursements	3	20				
			639	20		
Naumann, E.			202	50		
Neaveau, James			267	50		
<i>Carried forward</i>			241,147	48	190,110	96

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		241,147 48	190,110 96
<i>FIRE RANGING.—Continued.</i>			
Neaveau, S.		160 00	
Nelson, N.		214 50	
Neep, Percy		280 00	
Neill, J.		345 00	
Netmegesic, M.		180 00	
Nevish, J.		57 50	
Nevison, W. H.		580 00	
Newman, P.		294 25	
Nicholes, Wm.		280 00	
Nichols Company, J. L.	Supplies..	194 62	
Neddery, R.		322 50	
Noel, J.		275 00	
Nolan, C.		127 50	
Norman, F.		292 50	
Norris, R. E.		42 50	
Norton, W. A.		330 00	
Nutterville, Wm.		17 50	
O'Brien, D.		290 00	
O'Brien, P.		305 00	
O'Brien, T.		46 75	
O'Bryan, A. E.		315 00	
O'Connor, Wm.		280 00	
O'Connor, Wm.		215 00	
O'Connor, J.		240 00	
O'Connell, J. F.		342 50	
Oggleston, R.		393 25	
O'Grady, M.		357 50	
Oliver, J. A.	Disbursements..	120 00	
O'Neil, T.		347 50	
O'Neil, T.		357 50	
O'Neil, Fred.		145 75	
Orbick, O.		97 50	
Ore, A.		349 25	
Ormerod, H. G.		342 50	
Osborne, A.		317 50	
Oskaboose, S.		315 00	
Oskaboose, F.		315 00	
Quillette, A.		302 50	
Ovenstone, J.		308 50	
Page, Fred.		357 50	
Palmer, Wm.		315 00	
Panasvich, E.		16 40	
Paquette, John		392 50	
Paradis, D.		60 00	
Parkhouse, H.		192 50	
Parkhurst, J.		347 50	
Passmore, T.		232 50	
Patrie, A.		92 50	
Patterson, Neal		316 25	
Paul, E.		198 00	
Paulter, C.		166 00	
Payette, F.		240 00	
Peacock, Wm.		125 00	
Pearce, Thos.		357 50	
Pearson, A.		117 50	
Pecott, J.		307 50	
Pellerin, E.		228 25	
Pelletier, C.		285 00	
Pelletier, E.		305 00	
Pellot, J. B.		305 00	
Pellow, H.		12 50	
Penard, R.		155 00	
<i>Carried forward</i>		256,369 25	190,110 96

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		256,369 25	190,110 96
<i>FIRE RANGING.—Continued.</i>			
Perrault, Fred.		50 00	
Perron, T.		277 50	
Perron, C.		190 00	
Perron, D.		184 25	
Peters, G. E.	735 00		
Disbursements	57 13		
		792 13	
Pettipher, C. R.		335 50	
Phelan, R.		50 00	
Picard, F.		313 50	
Picard, F.		313 50	
Pierie, Thos.		262 50	
Pigeon, C.		257 50	
Piggott, W. D.		382 50	
Piggott, J. A.		280 00	
Pingle, A.		330 00	
Pinnette, J.		324 50	
Poirier, E.		295 00	
Pollock, R.		285 00	
Poole, E. G.	1,125 00		
Disbursements	9,412 52		
		10,537 52	
Porteous, Wm.		370 00	
Pouquette, D.		6 75	
Pourpore, J.		187 00	
Powell, J.		317 50	
Powell, M.		317 50	
Premmo, P.		25 00	
Pritchard, F.		636 00	
Quackenbush, P.		360 00	
Quackenbush, C.		77 50	
Quail, Wm.		325 00	
Quartz, F. A.	196 00		
Disbursements	19 35		
		215 35	
Quinn, J. J.		345 00	
Rabbitts, Max	805 00		
Disbursements	9 70		
		814 70	
Ramsay, P.		322 50	
Raymond, A.		127 50	
Read, C.		481 00	
Regan, John		390 00	
Remilliard, S.		307 50	
Restoule, F.		297 50	
Revell, L. O.	915 00		
Disbursements	729 63		
		1,644 63	
Reynolds, J.		612 00	
Richardson, C.		207 50	
Richardson, S. G.		765 00	
Richardson, W. F.		35 00	
Richardson, R.		137 50	
Richardson, W. D.		310 00	
Richards, H.		255 00	
Ritcheson, W.		122 50	
Roach, Ed.		295 00	
Robertson, J.		387 50	
<i>Carried forward</i>		282,525 08	190,110 96

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		282,525 08	190,110 96
<i>FIRE RANGING.—Continued.</i>			
Robertson, W.		302 50	
Robinson, J. B.		370 50	
Rochford, A.		342 50	
Rockall, F. W.		260 00	
Ross, A.		350 00	
Rossboro, F.		231 00	
Rourke, E. O.		167 50	
Rowe, J.		367 50	
Roy, Alex.		325 00	
Roy, T.		375 50	
Ruddy, E. L., Co., Ltd.....Supplies..		1,067 60	
Ruddy, T.		390 00	
Rutherford, M.		190 00	
Rusnell, W. T.		87 50	
Russell, A.		3 50	
Ryan, W. H.		385 00	
Ryan, Wm.		325 00	
Sackrider, A.		2 50	
Sample, F.		167 50	
Savard, A.		137 50	
Sawyer, N.		347 50	
Sawyer, R.		347 50	
Scarlett, E.		242 50	
Scott, Robt.	835 00		
Disbursements	894 27		
		1,729 27	
Scott, Thos.		260 00	
Scott, T. E.		317 50	
Scott, D. S.		80 00	
Sculley, M.		147 50	
Searle, W.		25 00	
Seeley, P. P.		72 50	
Sharpe, J.		440 00	
Sheehan, D.		232 50	
Shields, H.		382 25	
Shea, J. O.		260 00	
Sherman, W.		5 50	
Sherwood, H. D.		147 50	
Short, J.		90 00	
Simmers, W. J.		287 50	
Simmons, J.		305 00	
Simpson, E.		338 25	
Simpson, A.		338 25	
Simpson, M.		322 50	
Sinclair, D.		340 00	
Sing, W. H.		139 00	
Singer, P.		25 00	
Singer, Wm.		77 50	
Skidmore, G. H.		67 50	
Slee, B.		21 00	
Small, M. A.		327 50	
Smellie, J.		302 50	
Smith, John		367 50	
Smith, J.		345 00	
Smith, G. B.		302 50	
Smith, T. D.		345 00	
Smith, G. D.		63 25	
Smith, S.		18 20	
Smith, G.		312 50	
<i>Carried forward</i>		298,145 65	190,110 96

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		298,145 65	190,110 96
<i>FIRE RANGING.—Continued.</i>			
Smith, D.		305 25	
Smith, David		230 00	
Smith, D.		302 50	
Smith, Dan		7 50	
Smith, H.		180 00	
Smith, V.		620 50	
Smith, C. C.		102 50	
Smyth, John		310 00	
Sodman, R.		77 50	
Souliere, W.		277 50	
Soway, J.		32 50	
Spaniel, P.		142 50	
Spears, Wm.		81 00	
Spencer, F.		92 50	
Spillett, A. F.		340 00	
Spillett, J. J.		340 00	
Spillett, P. L.		335 00	
Spooner, J. B.		190 00	
Spoon, P.		22 50	
Spreadborough, N.		367 50	
Stadelborean, B.		2 50	
Staniforth, A.		335 00	
Stata, S.		325 00	
Steep, Geo.		310 00	
Stevens, H.		235 00	
Stewart, D. J.		347 50	
Stewart, T.		127 50	
Stewart, A.		305 00	
Stewart, D.		9 90	
Stewart, J. A. Disbursements.		130 65	
Stitt, J. H.		277 50	
Stover, R. T.		300 00	
Strange, B.		382 50	
Stratton, R.		380 00	
Stringer, K.		295 00	
St. Dennis, Chas.		275 00	
St. Dennis, A.		190 00	
St. Jane, J.		270 00	
Sudds, D.		346 50	
Sullivan, P.		313 50	
Sullivan, N.		295 00	
Sutherland, J. W.		342 50	
Swanson, G.		346 50	
Sweeney, L.		85 00	
Tabbert, H.		287 50	
Tackney, Thos.	865 00		
Disbursements	678 63		
		1,543 63	
Tait, J.		390 00	
Tait, A.		390 00	
Tallon, M.		330 00	
Tang, J.		335 00	
Taylor, C.		215 00	
Thibb, E.		295 00	
Thomas, H.		343 00	
Thompson, J. W.		325 00	
Thomson, W. C.		296 00	
Thomson, J. L.		387 50	
<i>Carried forward</i>		313,867 08	190,110 96

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		313,867 08	190,110 96
<i>FIRE RANGING.—Continued.</i>			
Thompson, F.		305 00	
Tichborne, A.		556 00	
Tomlinson, C.		315 00	
Toohy, C.		112 50	
Toomer, S.		285 00	
Torrance, J. A.		320 00	
Tousseant, D.		192 50	
Tower, O.		345 00	
Tremblay, E.		207 50	
Tremblay, J.		197 50	
Tripp, E. C.		350 00	
Tryon, W.		152 50	
Turcotte, J.		245 00	
Turennie, O.		50 00	
Turpin, G. O.		198 00	
Tyson, John		320 00	
Urquhart, A.	840 00		
Disbursements	1,207 70		
		2,047 70	
Vanluven, M.		120 00	
Veley, Wm.		285 00	
Vincent, Thos.		282 50	
Vincent, H. T.		480 00	
Viseau, G.		3 75	
Viseau, L.		3 75	
Volker, P.		100 00	
Walker, G. W.		340 00	
Walker, E.		192 50	
Walsh, J.		206 25	
Wanamaker, W.		357 50	
Wanamaker, O.		542 00	
Ward, J.		368 00	
Ward, D.		402 50	
Warren, A.		275 00	
Watters, A. M.		357 50	
Watts, Geo.	Disbursements.	65 00	
Weiler, C.		305 00	
Weinholdt, C.		350 00	
Weir, Geo.		320 00	
Welch, J.		325 00	
Wesley, W. C.		162 50	
West, Wm.		342 50	
West, Walter		295 00	
West, H.		342 50	
West, G.		165 00	
Whitmore, D.		347 50	
Wickens, H.		374 00	
Wiggins, J. R.		75 00	
Wildman, A. R.		87 50	
Wilkes, L.		30 25	
Williams, S.		343 75	
Willis, E.		316 25	
Wilson, John		101 75	
Wilson, J.		382 50	
Wilson, J. G.		253 00	
Wilson, J. H.		320 00	
Wilson, B.		230 00	
Wilson, W. J.		302 50	
Wilson, A. B.		282 50	
<i>Carried forward</i>		330,501 53	190,110 96

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.
<i>Brought forward</i>	330,501	53	190,110	96
FIRE RANGING.—Concluded.				
Wilson, F.		6	25	
Wilson, D.	700	00		
Disbursements	1,285	83		
			1,985	83
Wilson, J. B.		50	00	
Winters, O.		97	50	
Woodcock, Geo.	441	75		
Disbursements	18	10		
			459	85
Woodcock, G.		313	50	
Woods, T. J.	800	00		
Disbursements	1,128	54		
			1,928	54
Woods, Geo.		342	50	
Woods, Wm.		297	50	
Wright, H. H.		272	50	
Wright, E.		345	00	
Wright, C.		207	50	
Wright, J. S.		332	50	
Youmans, A.		379	50	
Young, Jesse		66	00	
Young, Wm.		347	50	
			337,933	50
FOREST RESERVES.				
<i>Temagami Reserve, \$39,694.04.</i>				
Armstrong, H.		337	50	
Aubee, Theo.		385	00	
Aubin, N.		357	50	
Aymes, A. J.		275	00	
Barrett, T.		512	00	
Bechamp, Wm.		307	50	
Benard, B.		97	50	
Berlinquette, E.		310	00	
Black, Geo.		322	50	
Brownlee, F. C.		337	50	
Brosseau, Wm.		357	50	
Burnes, J. L.		267	50	
Campbell, A.		322	50	
Carleton, Geo.		317	50	
Clarke, Wm. G.		302	50	
Coghill, J. M.	448	00		
Disbursements	10	10		
			458	10
Corbeil, Jos.		315	00	
Cunning, J. E.		95	00	
Denne, D.		250	00	
Descateaux, J.		315	00	
Desroisiers, J.		310	00	
Desroisiers, E.		330	00	
Didier, H.	805	00		
Disbursements	694	28		
			1,499	28
Downey, F.		245	00	
Evaline, W.		372	00	
Faeris, R.		452	50	
Faulkner, D.		227	50	
Fillion, G.		227	50	
<i>Carried forward</i>	9,906	38	528,044	46

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		9,906 38	528,044 46
FOREST RESERVES.—Continued.			
<i>Temagami Reserve.—Continued.</i>			
Flanigan, W. G.		317 50	
Forbes, C.		252 50	
Francoeur, D.		307 50	
Fraser, J.		267 50	
Gale, W. J.		310 00	
Gauthier, O.		250 00	
Greenrod, S.		317 50	
Grenier, J.		322 50	
Griffith, R. K.		187 50	
Hartley, M.		365 00	
Hartt, I. B.		580 00	
Hartt, J. C.		77 50	
Harrison, J. W.		912 50	
Henry, R.		240 00	
Hindson, C. E.	1,208 00		
Disbursements	1,771 60		
		2,979 60	
Hoadley, John		305 00	
Jacob, S.		322 50	
Jenkins, W.		182 50	
Jennings, J. E.		92 50	
Johnston, W.		335 00	
Johnston, A. S.		337 50	
Jolicouer, E.		357 00	
Kennedy, Wm.		50 00	
Kennedy, J.		252 50	
Kilby, T.		265 00	
King, C. S.		155 00	
Laferrier, L.		280 00	
Lamarche, A.		912 50	
Lamarche, R.		230 00	
Laporte, F.		297 50	
Laporte, M.		297 50	
Lavigne, P.		357 50	
Layman, F.		337 50	
Little, Roy		185 00	
Marion, C.		357 50	
Mathews, F. W.		335 00	
Miller, J. R.		292 50	
Millichamp, Thos.		107 50	
Morel, A.	546 00		
Disbursements	14 23		
		560 23	
Morin, John		327 50	
Morphy, C.		237 50	
Morris, D. R.		262 50	
Murdell, J.		87 50	
Murphy, Jas.		292 50	
McCart, J.		132 50	
McDonald, A.		167 50	
McGarvey, P.		335 00	
McIntyre, J. E.		322 50	
McKay, W.		10 00	
McKechnie, A.		320 00	
McKenzie, T.		322 50	
McKissock, B.		167 50	
McMullin, W.		322 50	
<i>Carried forward</i>		28,105 71	528,044 46

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		28,105 71	528,044 46
<i>FOREST RESERVES.—Continued.</i>			
<i>Temagami Reserve.—Concluded.</i>			
McNabb, Wm.		275 00	
Nadon, P.		320 00	
Neil, H. J.		320 00	
Nolan, C. J.		320 00	
Normand, L.		371 00	
Ogden, F. H.		337 50	
Olson, Thos.		210 00	
Papineau, J.		62 50	
Petrant, Wm.		322 50	
Pirie, J. B.		322 50	
Powell, John		320 00	
Reesor, G. O.		365 00	
Reilly, J.		302 50	
Richardson, R.		302 50	
Rogers, J.		167 50	
Saunders, W. J.		322 50	
Sharpe, F. W.		320 00	
Simpson, T.		325 00	
Smith, T. M.		337 50	
Stevens, V.		122 50	
Sutherland, E.		225 00	
Taylor, F.		230 00	
Thorley, C. W.		312 50	
Thorpe, T.		372 50	
Tremblay, L.		285 00	
Tremblay, J.		285 00	
Trothier, J.		337 50	
Viverais, D.		830 00	
Viverais, M.		342 50	
White, J.		315 00	
Williams, H. B.		22 50	
Williams, A. E.		260 00	
Wilson, B.		47 50	
Wilson, Alex.		322 50	
Winder, A.		152 50	
Young, R. J.	860 00		
Disbursements	642 33		
		1,502 33	
<i>Metagami Reserve, \$8,252.02.</i>			
Bach, E. L.		340 00	
Baker, Wm.		357 50	
Blackwell, J. J.		350 00	
Briggs, A. V.		352 50	
Bruiette, F.		90 00	
Burden, John	885 00		
Disbursements	506 02		
		1,391 02	
Cadautte, Alex.		265 00	
Cameron, W. J.		357 50	
Cayen, J. B.		357 50	
Charette, N.		55 00	
Chatson, F. C.		380 00	
Chubb, Geo. W.		340 00	
Jack, J.		70 00	
Luke, Jas.		232 50	
Martin, Jas.		267 50	
<i>Carried forward</i>		44,900 06	528,044 46

Appendix No. 6.—Continued.

Service:	\$	c.	\$	c.	\$	c.
<i>Brought forward</i>			44,900	06	528,044	46
<i>FOREST RESERVES.—Continued.</i>						
<i>Metagami Reserve.—Concluded.</i>						
Moffitt, A. E.			355	00		
McFayden, Jas.			556	00		
McFarlane, D.			70	00		
Naview, R.			147	50		
Naview, J.			272	50		
Parkinson, R. K.			267	50		
Sauver, Fred.			190	00		
Sears, L.			265	00		
Stoddart, W. H.			210	00		
Thomas, O.			190	00		
Tuer, Wm.			235	00		
White, J. H.			287	50		
<i>Mississaga Reserve, \$26,854.08.</i>						
Acheson, L.			644	00		
Acheson, P. T.			160	00		
Beal, Chas. R.			192	50		
Beaudin, S.			357	50		
Beckett, A. G.			205	00		
Belanger, T.			380	00		
Bergeron, J.			55	00		
Best, H.			360	00		
Buisson, Wm.			372	50		
Bulmer, Andy			357	50		
Carnfelt, D.			385	00		
Carpenter, R. J.			592	00		
Causley, P.			367	50		
Chappish, J.			343	75		
Clute, Geo.			330	00		
Cochrane, J. E.			260	00		
Cornett, W. G.			330	00		
Cousineau, Max			330	00		
Couverette, John			340	00		
Daw, Chas. E.			350	00		
Deschamp, B.			357	50		
Draper, Wm.			50	00		
Duck, W. S.			372	50		
Duval, C. A.			935	00		
Disbursements			2,708	08		
					3,643	08
Ecker, C. M.			352	50		
Eveline, S.			340	00		
Fecto, Geo.			443	50		
Ferguson, E. A.			332	50		
Findlay, J.			401	50		
Fitzgerald, R.			32	50		
Godson, H.			395	00		
Heenan, P.			387	50		
Hillman, J.			395	00		
Hinder, P. G.			340	00		
Hobson, B.			345	00		
Jean, A.			652	00		
Kade, J. A.			206	25		
Lavender, P.			342	50		
Leblanc, Lorne			375	00		
Legace, F.			110	00		
<i>Carried forward</i>			64,532	14	528,044	46

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		64,532 14	528,044 46
<i>FOREST RESERVES.—Continued.</i>			
<i>Mississauga Reserve.—Concluded.</i>			
Lewis, S.		342 00	
Luke, S.		242 00	
Marcoux, E.		337 50	
Martin, H.		286 00	
Massey, J.		50 00	
Miller, W. J.		468 00	
Mitchell, John		242 50	
Morrison, Andrew		345 00	
Mulvaney, C.		302 50	
Murray, John		372 50	
McGrath, B.		340 00	
McKay, Alex.		202 50	
McLaughlin, J.		392 50	
McLean, C.		302 50	
McWatch, P.		330 00	
McWatch, S.		330 00	
Nichols, H.		612 00	
Nightingale, G. E.		280 00	
O'Connell, C.		275 00	
Orange, Wm.		365 00	
Paquette, O.		337 50	
Piper, Geo. E.		189 75	
Poulin, N.		332 50	
Reid, J.		402 50	
Sailor, H.		343 75	
Seeley, C. F.		347 50	
Snider, F.		217 75	
Spanial, J.		308 00	
Stubbs, W. J.		310 00	
Tongas, J.		52 50	
Trudeau, N.		310 00	
Turner, S.		343 75	
Wells, Geo.		355 00	
<i>Nepigon Reserve, \$27,752.36.</i>			
Allen, Wm.		437 25	
Ashcroft, Geo.		175 00	
Baker, A.		366 00	
Barton, J.		437 25	
Blanchard, G.		211 75	
Bliss, L. E.	Disbursements.	616 24	
Boissoneault, J.		437 25	
Bouchard, J.		598 50	
Cameron, P.		79 75	
Clark, W. R.		132 50	
Disando, M.		192 50	
Deschamp, D.		102 50	
Dumont, O.		420 75	
Esquaga, L.		212 50	
Farrel, C.		120 00	
Finlayson, J.		397 50	
Finlayson, D.		227 50	
Fitzback, J.		490 50	
Fitzback, D.		65 00	
Fitzpatrick, P.		437 25	
Florence, E.		192 50	
Godehere, J.		155 00	
<i>Carried forward</i>		81,305 13	528,044 46

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		81,305 13	528,044 46
FOREST RESERVES.— <i>Continued.</i>			
<i>Nepigon Reserve.—Continued.</i>			
Graham, D.		195 00	
Hardy, F.		437 25	
Hardy, R.		317 25	
Harper, G.		195 00	
Hendrickson, C.		3 75	
Holmes, J. A.		167 75	
Howson, B.		152 50	
Johnson, Wm.		7 50	
Kebuck, J.		2 50	
King, J.		347 50	
King, S.		397 50	
Kitcheinni, C.		180 00	
Lagard, L.		50 00	
Larone, Geo.		240 25	
Lash, A.		437 25	
Lavesque, J.		397 50	
Leo, P.		397 50	
Mann, L.		376 75	
Michael, S.		198 00	
Micholson, Geo.		120 00	
Micholson, C.		36 00	
Micholson, J.		407 50	
Mimault, E.		192 50	
Moore, H.		202 50	
Morriseau, J.		55 00	
Morriseau, P.		333 75	
Morrow, S.		437 25	
McDonald, M. C.		397 50	
McKechnie, J. A.	925 00		
Disbursements	217 58		
		1,142 58	
McLean, C. O.		208 00	
McLeod, E. H.	1,050 00		
Disbursements	5,137 29		
		6,187 29	
Nanee, T.		15 00	
Nanakowagosh, P.		195 25	
Nelson, A.		167 50	
Netamegesic, F.		195 00	
Netamegesic, Fred.		202 50	
Netamegesic, E.		170 00	
Newington, H.		305 00	
Nadon, P.		172 50	
Oscopekeda, J.		67 50	
Peters, J.		120 00	
Plouffe, W.		182 50	
Ponton, R.		3 75	
Porter, Thos.		291 75	
Poile, Joseph		191 75	
Poile, John		221 25	
Rae, A.		332 75	
Rudolph, L.		437 25	
Shapwakessic, O. M.		202 75	
Shapwakessic, A.		192 50	
Smith, H.		480 00	
Sutherland, J.		50 00	
Tepiscookeessic, P.		211 75	
Thompson, J.		503 50	
<i>Carried forward</i>		100,437 50	528,044 46

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.	\$	c.
<i>Brought forward</i>	100,437	50			528,044	46
FOREST RESERVES.— <i>Concluded.</i>						
<i>Nepigon Reserve.—Concluded.</i>						
Viccars, T. R.			385	50		
Vincent, J.			437	25		
Wadow, J.			280	00		
Ward, J.			44	00		
Watt, Thos.			2	50		
Watt, Moses			3	75		
Wawea, A.			120	00		
Willan, Wm.			652	25		
Wilson, F.			189	75		
<i>Eastern Reserve, \$2,704.17.</i>						
Bishop, John			350	00		
Brown, H.			350	00		
Gilmour, E.			350	00		
Hughes, Geo.			350	00		
Laundry, A.			332	50		
Tapping, Thos.	600	00				
Disbursements	21	67				
			621	67		
Young, Wm.			350	00		
<i>Sibley Reserve, \$100.00.</i>						
Oliver, J. A.			100	00		
					105,356	67
CULLERS' ACT.						
Oliver, J. A. ....Disbursements..					10	40
REFORESTRATION.						
Bell Telephone Company	35	78				
Express and cartage	38	13				
			73	91		
Supplies			1,018	18		
Labor			4,721	39		
Sundries			262	18		
					6,075	66
MINES AND MINING.						
Miller, W. G. Provincial Geologist, services.....	5,000	00				
Disbursements	413	54				
			5,413	54		
Knight, C. W., 1st Assistant Geologist, services ...	2,500	00				
Disbursements	924	19				
			3,424	19		
Burrows, A. G., 2nd Assistant Geologist, services	2,350	00				
Disbursements	593	89				
			2,943	89		
Hopkins, P. E., 3rd Assistant Geologist, services.	1,800	00				
Disbursements	609	30				
			2,409	30		
Rogers, W. R., Topographer, services	1,950	00				
Disbursements	43	35				
			1,993	35		
Bell, W. J., Cartographer, services			1,600	00		
<i>Carried forward</i>	17,784	27			639,487	19

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i> .....	.....	17,784 27	639,487 19
<i>MINES AND MINING.—Continued.</i>			
Mickle, G. R., Mine Assessor, services	4,200 00	4,544 45	
Disbursements	344 45		
Godson, T. E., Mining Commissioner, services....	4,500 00		
Morris, W. H., Mining Commissioner's Clerk, services	1,600 00		
White, Miss N., Stenographer	410 68	7,572 58	
Disbursements	1,061 90		
Sutherland, T. F., Chief Inspector of Mines, services	2,700 00	3,458 50	
Disbursements	758 50		
Collins, E. A., 1st Assistant Inspector of Mines, services	2,400 00	3,488 19	
Disbursements	1,088 19		
McMillan, J. G., 2nd Assistant Inspector of Mines, services .....	.....	1,670 00	
Bartlett, J., 3rd Assistant Inspector of Mines, services	1,728 50	1,817 49	
Disbursements	88 99		
Stovel, J. H., 4th Assistant Inspector of Mines, services	2,400 00	3,909 60	
Disbursements	1,509 60		
Jackson, P. A., Surveyor, services .....	.....	619 11	
McArthur, T. A., Inspector of Recorder's Offices, services	800 00	1,213 30	
Disbursements	413 30		
Beno, J. W., services	449 02	782 32	
Disbursements	333 30		
Cleary, J. F., services .....	.....	48 00	
Devanney, Thos., services .....	.....	22 00	
Foisy, F., services .....	.....	126 00	
Hawley, J. E., services	247 50	286 50	
Disbursements	39 00		
Kerr-Lawson, D. E., services .....	.....	156 92	
Ledoux, Prof. A., services	692 29	1,417 66	
Disbursements	725 37		
Moffatt, Miss A., services .....	.....	100 00	
Morgan, C. B., services	50 00	63 32	
Disbursements	13 32		
Moreau, Albert, services .....	.....	28 50	
Near, A. E., services	700 00	907 85	
Disbursements	207 85		
Parsons, Prof. A. L., services	423 08	823 67	
Disbursements	400 59		
Scott, John, services	750 00	961 35	
Disbursements	211 35		
King's Printer .....	.....	446 96	
Express .....	.....	11 00	
<i>Carried forward</i> .....	.....	52,259 54	639,487 19

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.	\$	c.
<i>Brought forward</i>			52,259	54	639,487	19
<i>MINES AND MINING.—Concluded.</i>						
Telegraphing			108	88		
Typewriters, repairs, etc.			107	30		
Sundries			102	93		
					52,578	65
<i>RESEARCH WORK.</i>						
Clarke, A. L., services					833	33
<i>MINING RECORDERS.</i>						
Browning, A. J., Recorder	1,150	00				
Loudon, W. E., Clerk	270	39				
Boyer, P. H., Clerk	112	50				
Disbursements	920	74			2,453	63
Campbell, C. A., Recorder	975	00				
Shanahan, Miss M., Stenographer	538	46				
Loudon, W. E., Clerk	171	15				
Disbursements	389	30			2,073	91
Gauthier, G. H., Recorder	1,500	00				
O'Brien, J. D., Clerk	1,066	74				
Loudon, W. E., Clerk	131	53				
Disbursements	1,144	10			3,842	37
Hough, J. A., Recorder	1,500	00				
Ginn, H. G., Clerk	939	86				
Powers, Miss E. M., Stenographer	335	00				
Loudon, W. E., Clerk	426	16				
McGonigal, Miss G., Stenographer	242	50				
Disbursements	1,227	99			4,471	51
Miller, N., Recorder	1,050	00				
Disbursements	159	15			1,209	15
Morgan, J. W., Recorder	1,050	00				
Disbursements	513	20			1,563	20
Morgan, M. R., Recorder	950	00				
Disbursements	322	39			1,272	39
McAulay, N. J., Recorder	1,850	00				
Sarsfield, J. M., Clerk	1,225	00				
Loudon, W. E., Clerk	134	62				
Munro, Miss E., Stenographer	782	50				
Smith, Miss M., Stenographer	210	00				
Disbursements	790	52			4,992	64
McQuire, H. F., Recorder	500	00				
Disbursements	158	93			658	93
Sheppard, H. E., Recorder					814	50
Skill, A., Recorder					611	93
Spry, W. L., Recorder	825	00				
Disbursements	118	20			943	20
Express	70	04				
King's Printer	937	20				
Telegraphing	10	55			1,017	79
<i>Carried forward</i>					25,925	15
					718,824	32

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.	\$	c.
<i>Brought forward</i>					718,824	32
PROVINCIAL ASSAY OFFICE.						
Leat, Arthur			357	84		
McNeill, W. K.	1,900	00				
Disbursements	60	60				
			1,960	60		
Rothwell, T. E.	1,325	00				
Disbursements	161	20				
			1,486	20		
Todd, E. W.			179	99		
Supplies	859	28				
Disbursements	232	92				
			1,092	20		
EXPENSES NOT OTHERWISE PROVIDED FOR.					5,076	83
Canadian Northern Express Co., express			1	52		
Fensom, G. R., supplies			14	05		
Parsons, Prof. A. L. disbursements			123	56		
					139	13
MINERAL DISPLAYS AT EXHIBITIONS.						
Aikins, W. E., Services <i>re</i> Toronto Exhibition			8	75		
Green, W. F., Services <i>re</i> Toronto Exhibition			56	00		
Stephens, J., Services <i>re</i> Toronto Exhibition			8	00		
West, W. J., Services <i>re</i> Toronto Exhibition			40	00		
General Disbursements <i>re</i> Toronto Exhibition			1,157	60		
					1,270	35
LEGAL ASSISTANCE ENFORCING MINING ACT.						
Donovan, T., Expenses <i>re</i> case of J. Osmak					30	95
SOCIETY MEMBERSHIP FEES					46	00
SURVEYS					43,214	76
BOARD OF SURVEYORS					200	00
INVESTIGATION OF TREE DISEASES					13,734	87
INSURANCE					360	23
ALLOWANCE TO SCHOOL SECTIONS IN TOWNSHIP OF SOUTH WALSHINGHAM					150	00
CANADIAN FORESTRY GRANT					300	00
REFUNDS—Miscellaneous					8,993	80
COLONIZATION AND IMMIGRATION.						
PRINTING, ADVERTISING, ETC.			16,702	71		
ADVANCE COST OF FARM LABOURERS' TRANSPORTATION			536	65		
LAND GUIDES			1,259	00		
EMIGRATION WORK IN GREAT BRITAIN			20,243	64		
ALLOWANCE TO RICHARD REID			3,188	00		
RENTAL IMMIGRATION OFFICE			1,882	07		
TRAVELLING EXPENSES LONDON OFFICIALS			182	81		
IMPERIAL TAX			481	22		
WOMEN'S WELCOME HOSTEL			1,400	00		
WOMEN'S HOSTEL AND TRAVELLERS' AID			500	00		
					46,376	10
CONTINGENCIES.						
<i>Departmental.</i>						
Printing and Binding	2,642	20				
Stationery	6,948	47				
			9,590	67		
<i>Carried forward</i>			9,590	67	838,717	34

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		9,590 67	838,717 34
<i>CONTINGENCIES.—Continued.</i>			
<i>Departmental.—Concluded.</i>			
Postage	2,599 45		
Express	327 54		
Telegraphing	605 71	2,926 99	
Car Fare	60 00		
Subscriptions	580 78	665 71	
Advertising	15,834 06		
Typewriters and repairs		16,414 84	
Ferguson, Hon. G. H., travelling expenses	500 00	1,302 53	
Grigg, A., travelling expenses	55 72		
Hele, C. C., travelling expenses	137 12		
Hutcheon, J., disbursements	516 88		
Rorke, L. V., disbursements	100 00		
Keefer, F. H., legal services	1,757 30		
White & Williams, legal services	58 52		
Rice, Lewis & Son, surveyor's posts	440 00		
Extra Clerks	7,774 72	3,565 54	
Maps	5,720 54		
Sundries	175 76		
		13,671 02	
			48,137 30
<i>Bureau of Mines.</i>			
Printing and Binding	1,275 49		
Stationery	3,142 24		
Postage	1,125 30	4,417 73	
Telegraphing	57 15		
Express and Cartage	77 55		
Advertising	1,242 50		
Subscriptions	148 58		
Maps	323 01		
Typewriters, repairs, etc.	452 50	2,974 09	
Dunn, A. J., searching titles	100 10		
Gibson, T. W., travelling expenses	27 00		
Extra Clerks	2,187 93	579 60	
Sundries	203 15		
		2,391 08	
			10,362 50
<i>Forestry.</i>			
Zavitz, E. J., travelling expenses	189 76		
White, J. H., travelling expenses	14 50		
Postage	300 51	204 26	
Typewriters, etc.	439 00		
Extra Clerks	746 68		
Supplies	302 36		
Sundries	106 56		
		1,895 11	
			2,099 37
<i>Colonization.</i>			
Printing and Binding	37 93		
Stationery	361 71		
		399 64	
<i>Carried forward</i>		399 64	899,316 51

Appendix No. 6.—Concluded.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i> .....	.....	399 64	899,316 51
<i>COLONIZATION.—Concluded.</i>			
Postage	860 00		
Express and Cartage	125 85		
		985 85	
Telegraphing	135 81		
Subscriptions	41 20		
Typewriters, repairs, etc.	53 25		
		230 26	
Argue, J., travelling expenses	36 70		
Bindon, F. W., travelling expenses	427 40		
Farrell, John, travelling expenses	293 54		
Jones, R. A., travelling expenses	514 05		
Macdonell, H. A., travelling expenses	137 15		
Thompson, J., travelling expenses	329 42		
Tutt, H., travelling expenses	431 86		
Sundries	51 89		
		2,222 01	
			3,837 76
			903,154 27

D. GEO. ROSS,

Accountant.

ALBERT GRIGG,

Deputy Minister of Lands and Forests.

Appendix No. 7.

Statement of expenses on account of various services under the direction of the Department of Lands, Forests and Mines, for the year ending October 31st, 1917.

Service.	\$	c.	\$	c.
ALGONQUIN PARK	28,596	23		
ALGONQUIN PARK, CLEANING RIGHT-OF-WAY	5,027	66		
			33,623	89
QUETICO PROVINCIAL PARK			9,056	50
VETERANS' COMMUTATION			150	00
ROYAL NICKEL COMMISSION			45,721	64
LEGAL INVESTIGATIONS			2	90
			88,554	93

D. GEO. ROSS,
Accountant.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 8.

PATENTS OFFICE (LANDS BRANCH).

Statement of Patents, etc., issued from 1st November, 1916, to 31st October, 1917.

Public Lands (late Crown).....	462
" " (late School).....	22
" " (late Clergy Reserves).....	7
" " (University).....	8
Free Grant Lands (Act of 1913)	298
" " (Act of 1901) (Veterans)	195
Mining Lands (Patents).....	542
" " (University).....	3
Mining Leases	138
Crown Leases.....	24
Licenses of Occupation.....	53
Timagami Island Leases	4
Sand and Gravel Licenses.....	22
Total.....	1,778

CHARLES S. JONES,
Patents Clerk.
W. C. CAIN,
Chief Clerk in Charge.

ALBERT GRIGG,
Deputy Minister of Lands, Forests and Mines.

Appendix

WOODS AND

Statement of Timber and Amounts accrued from Timber Dues, Ground

QUANTITY AND

Agencies.	Area covered by timber licenses.	Saw logs.				Boom and	
		Pine.		Other.		Pine.	
	Square miles.		Feet B.M.	Pieces.	Feet B.M.	Pieces.	Feet B.M.
Western Timber District	10,168½	5,105,001	187,349,181	772,450	26,731,557	75,342	8,490,009
Belleville Timber District	872	17,431	563,449	60,921	2,385,855	39	5,842
Ottawa Timber District	5,273½	315,205	11,471,952	159,528	5,037,261	2,490	265,644
	16,313¾	5,437,637	199,384,582	992,899	34,154,673	77,871	8,761,495

General Statement

Agencies.	Railway Ties.	Posts.	Poles.	Stave Bolts.	Pulpwood,		
		Cords.	Pieces.	Cords.	Cords.	Transfer bonus.	Interest.
Western Timber District	1,542,610	715	5,321	1,390	207,654	\$ 5,485 00	\$ 18,488 25
Belleville Timber District	1,211	9	.....	.....	151	400 10	1,305 25
Ottawa Timber District	1,005	660	768	.....	15,866	780 00	1,295 61
	1,544,826	1,381	6,089	1,390	223,671	6,665 10	21,089 11

JOHN HOUSER,
Chief Clerk in Charge.

No. 9.

FORESTS.

Rent and Bonus during the year ending 31st October, 1917.

DESCRIPTION OF TIMBER.

Dimension.		Cedar.	Piling.				Cordwood.		Tan Bark.
Other.							Hard.	Soft.	
Pieces.	Feet B.M.	Lineal feet.	Lineal feet.	Pieces.		Cords.	Cords.	Cords.	
23,248	2,392,247	2,424	168,363	5,845	328,992	29,104	22,979	3,106	
536	85,711	.....	.....	.....	.....	.....	.....	54
3,810	466,714	.....	.....	.....	.....	2,855	526	772
27,594	2,944,672	2,424	168,363	5,845	328,992	31,959	23,505	3,932	

of Timber.—Concluded.

Amounts accrued.

Trespa		Bonus.		Deposits timber sales.	Ground rent.	Fire protection.	Total.
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
10,483 80	621,333 63	466,094 59	125,000 01	64,815 00	86,604 26	1,398,304 54	
717 19	3,447 01	376 96	.....	5,593 00	.....	11,839 51	
329 22	26,329 91	.....	.....	28,461 86	28,722 80	85,919 40	
11,530 21	651,110 55	466,471 55	125,000 01	98,869 86	115,327 06	1,496,063 45	

ALBERT GRIGG,
Deputy Minister.

Appendix No. 10.

WOODS AND FORESTS BRANCH.

Statement of revenue collected during the year ending October 31st, 1917.

Amount of Western collections at Department	\$1,543,893 94
do Belleville collections at Department	19,046 13
do Ottawa collections at Department	132,763 01
	<hr/>
	\$1,695,703 08

WOODS AND FORESTS BRANCH REVENUE,

October 31st, 1917.

WESTERN DISTRICT—

Timber dues	\$728,513 97
Bonus	515,032 45
Ground rent	64,815 00
Interest on dues	18,059 79
Interest on ground rent	428 46
Transfer fees	5,485 00
Timber sale deposit	125,000 01
Fire protection	86,604 26
	<hr/>
	\$1,543,938 94

OTTAWA DISTRICT—

Timber dues	\$73,457 74
Ground rent	28,461 86
Interest on dues	812 21
Interest on ground rent	483 40
Transfer fees	780 00
Fire protection	28,722 80
	<hr/>
	132,718 01

BELLEVILLE DISTRICT—

Timber dues	\$10,944 89
Bonus	802 89
Ground rent	5,593 00
Interest on dues	678 64
Interest on ground rent	626 61
Transfer fees	400 10
	<hr/>
	19,046 13
	<hr/>
	\$1,695,703 08

WOODS AND FORESTS.

Bonus	\$640,835 35
Timber dues	832,467 24
Ground rent	100,408 33
Transfer fees	6,665 10
Fire protection	115,327 06
	<hr/>
	\$1,695,703 08

JOHN HOUSER,
Chief Clerk in Charge.

ALBERT GRIGG,
Deputy Minister.

Appendix No. 11.

Statement of work done in the Military Office, Lands Branch of the Department of Lands, Forests and Mines, during the year ending October 31st, 1917.

References for Veteran Patents issued	158
Locations under military certificates	87
Certificates applied in payment of lands	14
Certificates surrendered for commutation money	3
Letters received	1,890
Letters written	2,100
Special letters to agents	320
Special letters to mining recorders	110
Maps and reports supplied to veterans	470
Printed forms sent out	450
Copies of Veteran Act supplied	30

H. E. JOHNSTON,
Military Clerk.
W. C. CAIN,
Chief Clerk in Charge.

ALBERT GRIGG,
Deputy Minister.

Appendix No. 12.

LIST OF CULLERS.

Anderson, M. M.	Almonte.	Brown, Silas	Klock's Mills.
Allan, James D.	Bracebridge.	Boland, W. G.	Eganville.
Appleton, Erwin B.	Bracebridge.	Baulke, George R.	Aylmer, Que.
Albert, Andrew	Ottawa.	Bouchey, Arthur	Massey.
Adams, J. Q.	Longford Mills.	Buchanan, Mark	Trout Mills.
Anderson, Patrick J.	Campbellford.	Barrett, W. J.	Thessalon.
Anderson, J. C.	Gravenhurst.	Bromley, Thomas	Fembroke.
Allan, Alfred	Ottawa.	Bremner, John L.	Adamston.
Allen, R. A.	Bannockburn.	Breen, Bernard	Garden River.
Aikens, Geo. M.	French River.	Buie, Dougal	Providence Bay.
Appleby, Ridley	Katrine.	Baker, Thomas	Blind River.
Adams, James M.	Sault Ste. Marie.	Blais, Felix	Hull, Que.
Aylward, James	Peterborough.	Balsdon, George	Keewatin.
Archibald, John L.	Keewatin.	Bromley, W. H.	Pembroke.
Austin, Wm. G.	Renfrew.	Bowers, Isaac	Little Current.
Anderson, Charles	Little Current.	Brown, Thomas	Barrie.
Anderson, John	Cartier.	Bass, Walter R.	W. Huntingdon.
Adair, Thomas Albert ..	Gananoque.	Bates, Robert	Kenora.
Anderson, J. G.	Alpena, Mich.	Binnie, Thomas	Port Arthur.
Alexander, Samuel	Arden.	Blair, William	Keewatin.
Adams, Wm.	Westmeath.	Bick, Thomas	Bobcaygeon.
Arkle, George	Kenora.	Burke, John Thomas ..	Midland.
Armstrong, Jas. Theodore.	McKellar.	Buchan, Sterling	L'Orignal.
Armstrong, Thomas J. ...	Arnprior.	Brown, Joseph A.	Spanish.
Acheson, Ira M.	Westmeath.	Baird, P. C.	Rainy River.
Albert, Alfred E.	Ottawa.	Brill, J. W.	Mine Centre.
Alma, John E.	Hawkesbury.	Beattie, Arthur W.	Arnprior.
Adams, George A.	Longford.	Brock, H. S.	Ottawa.
Ansley, John Albert	Thessalon.	Benson, John Bird	Midland.
Ansley, John Jenkins ...	Thessalon.	Brennan, Rich'd Lawrence	Peterborough.
Ainslie, Alexander	Spanish.	Brown, Hugh Riside ...	Huntsville.
Apleton, E. A.	Kenora.	Bryan, Frank	Keewatin.
Arnill, William	Iron Bridge.	Bennett, Edward Clinton.	Ahmik Harbour.
Adams, Fred.	L'Orignal.	Blaine, Harvie Thomas ..	Orillia.
Alexander, R. Harvey ...	Spragge.	Barrett, Thomas	Barrie.
Alexander, J. Albert ...	Spragge.	Bickell, James Manuel...	Sault Ste. Marie.
Ainslie, Donald McF. ...	Whitestone.	Buisson, William	Sudbury.
Ansley, William	Thessalon.	Borrett, James A.	Sault Ste. Marie.
Argues, W. A.	Kearney.	Bliss, C. Lidden	Sudbury.
Almers, John	Kenora.	Bray, James	Kinmount.
Allard, Telesphore Jos. ...	W. Port William.	Bremner, George	Arnprior.
Andrews, Geo. E.	Massey.	Bromley, Samuel	Pembroke.
Brophy, Michael Patrick.	Massey Station.	Brown, A. C.	Fitzroy Harbour.
Boland, Abraham	Cartier.	Berlinquet, Julius	Opimicon, Que.
Brown, Singleton	Bracebridge.	Blastorah, Fred. L.	Harwood.
Barry, Thomas James ...	Hastings.	Burns, Clifton H.	Little Current.
Blanchet, Paul Fred'k. ...	Ottawa.	Beaumont, Ernest	Parry Sound.
Bird, W. S.	Parry Sound.	Beattie, Alex.	Whitney.
Bayley, James T.	Gravenhurst.	Brennan, Reginald	Gravenhurst.
Bell, Henry	Ottawa.	Boyd, George	Gravenhurst.
Beach, Herbert Mahlon ..	Ottawa.	Bissell, Geo. Thomas ...	Trenton.
Barry, Thomas	Millbridge.	Baxter, Richard	Deseronto.
Beatty, W. R.	Parry Sound.	Breaugh, Edward	Deseronto.
Brooks, Frederick Wm. ...	Mackay's Station.	Boyd, Geo. A.	Thessalon.
Brown, Robt. D.	Port Sidney.	Buchan, Frederick	Arnprior.
Breed, Arthur G.	Penetanguishene.	Bradbury, Kerwood	Blind River.
Barnes, Thomas Geo. Lee.	Muskoka Mills.	Belanger, John B.	Mattawa.
Buchanan, Robert	Coldwater.	Bird, J. F.	Bracebridge.
Beck, Jacob Frederick ...	Penetanguishene.	Beddome, W. E.	Dryden.
Bird, Joseph Manly	Muskoka Mills.	Barrett, Patrick	Arnprior.
Boyd, John F.	Thessalon.	Brundage, Alfred W. ...	Pembroke.
Brandon, Martin W.	Peterborough.	Brougham, Thomas	Eganville.
Bell, John C.	Peterborough.	Blair, Robert I.	Arnprior.
Bartlett, George W.	Warren.	Benson, John W.	Sturgeon Bay.

*Appendix No. 12.—Continued.*LIST OF CULLERS.—*Continued.*

Beck, Chas. M., Jr.	Penetanguishene.	Cochrane, George	Peterborough.
Beatty, W. J.	Coldwater.	Coburn, John	Lindsay.
Burns, C. W., Jr.	South River.	Crewe, Nathaniel	Bobcaygeon.
Bell, John Henry	Burk's Falls.	Cameron, Alexander	Norman.
Berry, Harold	Labelle, Q.	Chrysler, Frank R. L.	Webbwood.
Black, George	Barwick.	Callaghan, Thomas, Jr. ...	Campbellford.
Bettes, John Hiram	Muskoka Mills.	Carson, Hugh	Kenora.
Brady, John	Renfrew.	Calder, George	Woodville.
Brown, James	Buckingham, Q.	Callaghan, Dennis	Campbellford.
Brooks, W. J.	Blind River.	Corrigan, Robt. T.	Emo.
Burd, James Henry	Nairn Centre.	Cameron, John H.	Kenora.
Brinkman, Alex. B.	Sault Ste. Marie.	Carson, Melvin	Little Current.
Black, Jacob	Barwick.	Cameron, John K.	Spanish River.
Beattie, W. J.	Arnprior.	Cassidy, William	Little Current.
Bromley, William	Westmeath.	Coons, Geo. Washington ..	Peterborough.
Bissell, Hartie	Trenton.	Chisholm, Geo. Leopold. ...	Sault Ste. Marie.
Brown, Robert	Starrat.	Clark, Wm. J.	Birkendale.
Beaton, Hugh	Waubaushene.	Carr, Herbert E.	North Bay.
Bailey, Arthur	Farry Sound.	Cochrane, Alfred L.	Muldoon, Que.
Burd, James Henry	Farry Sound.	Campbell, George	Fort Frances.
Bailey, Samuel James ..	Orillia.	Chalmers, George James. ...	Peterborough.
Burton, Tinswood	Renfrew.	Caverly, David Charles ..	Parry Sound.
Boyes, James	Huntsville.	Campbell, Archibald J. ...	Little Current.
Brown, John	Rockdale.	Close, John L.	Arnprior.
Brennan, Edward Scott. ...	Sundridge.	Carmichael, Donald	Arnprior.
Bell, John Arguey	Klock's Mills.	Carty, John	Arnprior.
Bromley, Edw. H.	Pembroke.	Cleary, Patrick M.	Arnprior.
Bliss, Lawrence E.	Byng Inlet.	Caldwell, James M.	Callender.
Buee, Neil	Spanish Station.	Cushing, John J.	Davidson, Que.
Brazziel, Leonard	Spanish Station.	Crebo, William	Thessalon.
Bowie, James	Bryson, Que.	Cullen, Michael J.	Massey Station.
Barrie, Nicholas J.	Ottawa.	Cuthbertson, William ...	Arnprior.
Burke, J. D.	Kenora.	Carss, Percy	Thessalon.
Bowen, Thomas	Deseronto.	Coghlan, Michael	Chapeau, Que.
Brown, James F.	Baysville.	Cameron, Alexr. Gordon. ...	Beauchene, Q.
Blastorah, Bernard	Harwood.	Cassaday, W. W.	Emo.
Brannan, William H.	Pembroke.	Carter, Robert E.	Fesserton.
Bromley, Thomas	Webbwood.	Coleman, Jos.	Baysville.
Barr, J. C.	Fort Frances.	Cardiff, Geo. McDougall. ...	Sudbury.
Bradley, J. M.	Mine Centre.	Cameron, W. D.	Kenora.
Burns, Dominick	Webbwood.	Crandal, F.	Port Arthur.
Blaikie, Campbell D.	Fort Frances.	Campbell, James R.	Eganville.
Bury, Henry J.	Stratton.	Campbell, John A.	Galleta.
Brown, R. A.	Cartier.	Caillier, Hyacinth	Arnprior.
Brouse, Silas	Webbwood.	Chamberlain, Thomas ...	Bobcaygeon.
Byrne, James	Kenora.	Cooper, David Allan	Millbrook.
Buchan, A.	Ft. William.	Cox, Henry	Ballerica, Que.
Bailey, Alex.	Thor Lake.	Currie, James	Ottawa.
Bennett, Oscar T.	Little Current.	Clarkson, A. E.	Midland.
Campbell, Robert John ...	Flinton.	Clairmont, E.	Gravenhurst.
Carpenter, John A.	Arnprior.	Cameron, W. F.	Sturgeon Bay.
Campbell, Alex. J.	Trenton.	Connolly, David	Gravenhurst.
Carson, James	Bracebridge.	Campbell, P. C.	Sault Ste. Marie.
Campbell, J. M.	Bracebridge.	Cadenhead, Alexander ...	Midland.
Campbell, Robert	Bracebridge.	Carpenter, R. J.	Arnprior.
Clairmont, Joseph	Campbellford.	Christie, William Pringle. ...	Severn Bridge.
Clarkson, Robert J.	Parry Sound.	Campbell, C. V.	Sault Ste. Marie.
Carruthers, Aaron	Hintonburg.	Clegg, Samuel	Peterborough.
Calder, Wm. J.	Bark Lake.	Clairmont, William L. ...	Gravenhurst.
Chew, Joseph	Gravenhurst.	Cook, Sydney P. W.	Spanish Station.
Cole, James Colin	Ottawa.	Corrigan, John	Baysville.
Cameron, Wm.	Collin's Inlet.	Chalmers, Alexander M. ...	Peterborough.
Cain, Robert	Midland.	Charlton, George A.	Collingwood.
Crawford, Stephen W. ...	Thessalon.	Cahill, Thomas	Nosbonsing.

*Appendix No. 12.—Continued.*LIST OF CULLERS.—*Continued.*

Chew, Manley	Midland.	Dillon, John	Calabogie.
Cooper, James Eddy	Saurin.	Durrell, Jos. Nelson	P't'ge du Ft., Q.
Cook, Reinhardt	South River.	Durrell, John	Callender.
Crowe, Cecil	Bobcaygeon.	Donally, Richard S.	Sudbury.
Callaghan, Denis	Trenton.	Devine, William	Cook's Mills.
Collins, James	Barryville.	Durrill, William	Nosbonsing.
Claffey, Edward D.	Fort William.	Draper, Patrick	Quyon, Que.
Coyne, Phin	Chelmsford.	Davis, J. P.	Bobcaygeon.
Constantine, Eudore	Blind River.	Dale, John Alexander	Birkendale.
Cameron, Ewan	Gordon Lake.	Dinsmore, Chas. L.	Huntsville.
Campbell, Daniel N.	Buck'gham, Que.	Drum, Patrick	Belleville.
Canniff, R. W.	Kenora.	Durham, Edgar S.	Rosseau.
Cassidy, S. C.	Dunchurch.	Duquette, Chas.	Webbwood.
Charleston, John Baptiste.	Ottawa.	Davis, William Albert ..	Bobcaygeon.
Comer, Billa F.	Tweed.	Dickson, Robert Alexander	Keene.
Carter, George	Sundridge.	Dawkins, John	Gravenhurst.
Corrigan, Robt. J.	Emo.	Doxsee, James E.	Gravenhurst.
Caswell, Grant	Coldwater.	Didier, L. P.	Aylmer, Que.
Caswell, Geo.	Coldwater.	Devine, Patrick J.	Sheenboro, Que.
Chemir, David A.	Pembroke.	Dinsmore, Richard	Huntsville.
Clairmont, Philadelp L.	Gravenhurst.	Dunn, Percy E.	Longford Mills.
Crowe, Edgerton	Bobcaygeon.	Duval, Chas.	Halfway.
Castonquay, A. C.	Chelmsford.	Donlevy, James	Calabogie.
Clark, Donald Allan	Port Arthur.	Doris, Patrick	Peterborough.
Charette, Herbert	Devlin.	Doris, John	Peterborough.
Christie, Uriah W.	Fort Frances.	Donahue, Michael	Erinsville.
Clark, Joseph C.	Fort Frances.	Doran, W.	Belleville.
Crowe, Leslie	Bobcaygeon.	Dickson, Robert R.	Kippewa, Que.
Campbell, Duncan W.	Stewartville.	Donlevy, Wm. C.	Rockcliffe.
Callahan, Thomas N.	Arnprior.	Duff, Chas. A.	Stewartville.
Clements, Albert James ..	Bent River.	Dean, James C.	Kenora.
Carney, Albert	Sault Ste. Marie.	Duff, Peter A.	Claybank.
Collins, Arthur	Massey Station.	Duncan, Downey	Rainy River.
Carter, George	Lavelle, Que.	Dougherty, J. M.	Fort Frances.
Chitty, Alfred E.	Kenora.	Dunn, John F.	Spanish Mills.
Cardiff, Richard J.	Arnprior.	Dyke, Morris F.	Blind River.
Conway, Thomas	Barry's Bay.	Devitt, Frank	Dinorwic.
Costello, Thomas M.	Antrim.	Dickie, David	Port Arthur.
Cross, R. J.	Silver Islet.	Dupuis, Alfred	Keewatin.
Clark, R. H.	Port Arthur.	Devlin, Samuel	Spanish Mills.
Clark, Wm. R.	Port Arthur.	Dougherty, W. H.	McLaren's Bay.
Coombs, A. B.	Bracebridge.	Duffy, William A.	Callender.
Cameron, A. F.	Emo.	Duncan, Edward J.	Sturgeon Falls.
Campbell, J. S.	Fort Frances.	Dennie, Frank	Capreol.
Clearihue, Geo. A.	{ 784 Hubert St., Montreal, Que.	Dempsey, James	Pulp Siding.
Cuddihy, J. T.	Pembroke.	Enlaw, Oliver	Campbellford.
Cameron, Ronald	Ignace.	Ebert, Andrew P.	Pembroke.
Cole, J. E.	Kenora.	Ellis, Alexander	Arnprior.
Currie, J. E.	Kenora.	Ellis, John	Westmeath.
Carroll, Peter	McDougall's Mills.	Errington, Joseph	Sundridge.
Clempson, A. J.	Dryden.	Eddington, Henry John ..	Parry Sound.
Didier, Hector	Mattawa.	Enright, Daniel	Port Arthur.
Doran, Frank	Barryville.	Eager, James	Parry Sound.
Dunning, E. Percival	Parry Sound.	Elliott, Porter P.	Mine Centre.
Duff, R. J.	Arnprior.	Elliott, William	Cache Bay.
Durrill, John W.	Ottawa.	Edgar, J. E.	Kenora.
Dickson, John	Sundridge.	Elliott, George E.	Peterborough.
Dickson, James L.	Michipic'ten Hr.	Edwards, Joseph K.	Gillies Depot.
Dobie, Harry	Sault Ste. Marie.	Eldridge, Robert	Fort Frances.
Deacon, Charles	Sault Ste. Marie.	Fraser, John A.	Kenora.
Danter, R. W.	Parry Sound.	Ferguson, Wm. H.	Red Bay.
Doyle, T. J.	Eau Claire.	Forbes, Chris. McKay	McLean's Depot.
Dobie, Alexander R.	Blind River.	Fitzgerald, E. Clair	Parry Sound.
Darling, J. M.	Byng Inlet.	Farrell, W. H.	Ironside, Que.
		French, Lewis William ..	Wisawasa.

Appendix No. 12.—Continued.

LIST OF CULLERS.—Continued.

Fraser, William A.	Mattawa.	Green, Forman A.	Gilmour.
Finerty, Patrick	Rochfort.	Green, Samuel E.	Parry Sound.
Farnand, Frank	Diamond.	Grant, John	Flinton.
Fulton, Philip S.	Spanish Station.	Green, Arthur	Ottawa.
Fitzgerald, Ulyot C.	Parry Sound.	Green, Norman McL.	Bancroft.
Fenn, George	Bracebridge.	Gillis, John J.	Whitefish.
Fortune, Owen	Trenton.	George, R. W.	Parry Sound.
Fraser, David	Norman.	Gardiner, John	Parry Sound.
France, John	Collin's Inlet.	Golden, Frank J.	Trenton.
Ferguson, Ernest A.	Baysville.	Garson, Robert	Thessalon.
Ferguson, Alpen	Mattawa.	Gropp, August	Penetanguishene.
Ford, John William B.	P'r'tage du Ft., Q.	Grozelle, Antoine D.	Muskoka Mills.
Ford, Charles	Wahnapiatae.	Goulais, James	Peterborough.
Findlay, J. H.	Braeside.	Grayson, Charles	Keewatin.
Fraser, James	Renfrew.	Gladstone, Harry E.	Cook's Mills.
Fairen, Francis	Peterborough.	Guertin, Oliver	Biscotasing.
Faulkner, Jos.	Fesserton.	Gelinas, Frank	Hull, Que.
Fraser, Alexander, Jr.	Westmeath.	Gwynne, John	Hawkesbury.
Fairbairn, William	Calabogie.	Gray, Frederick M.	Brule Lake.
Fraser, William A.	Pembroke.	Graham, Edward G.	Wahnapiatae.
Fraser, Foster	Pembroke.	Griffin, James	Spanish River.
Fraser, Wm.	Little Current.	Gordon, Alexander B.	Pembroke.
Fraser, Hugh Alexander.	Pembroke.	Gareau, Noah J.	Pembroke.
Flaherty, John	Lindsay.	Gillies, D. A.	Carleton Place.
Fisher, Wm.	Trenton.	Gilligan, Edward	Mattawa.
Fox, Thomas	Deseronto.	Gladman, Charles	Parry Sound.
Fallis, James W.	Sturgeon Bay.	Garrow, John D.	Ottawa.
Fairbairn, N. H.	Webbwood.	German, William Burton.	Wahnapiatae.
Friel, John	Trenton.	Gordon, Robert W.	Pembroke.
Fox, Charles	Trenton.	Guertin, Nelson	Petawawa.
Featherstonehaugh, W. H.	Penetanguishene.	Gardner, John	Kenora.
Friar, Schuyler	Westmeath.	Gunter, Peter M.	Gilmour.
Farren, Joel	Savanne.	Glennie, William	Millbridge.
Fraser, Duncan	Big Forks.	German, Maurice J.	Fenelon Falls.
Freestone, Walter	Burk's Falls.	Gillies, John A.	Braeside.
Fraser, John	Bancroft.	Goddin, Edward	Griffith.
Fitzgerald, D. C.	Spanish Station.	Grant, Joseph	Eganville.
Foster, Wm. C.	Searchmont.	Gilmour, James B.	Braeside.
Frazer, Jas. C.	Spanish Mills.	Gorman, Joseph P.	Sault Ste. Marie.
Fremlin, H. P.	Richard's Land'g.	Gordon, Thomas A.	Hall's Bridge.
Foster, Ed. G.	Sault Ste. Marie.	Gray, Albert H.	Biscotasing.
Farrel, Peter M.	Whitefish.	Gadway, John	Parry Sound.
Fairhall, Edward	Whiteside.	Garrow, Edward	Webbwood.
Fraser, Levi	Bracebridge.	Golding, William	Dorset.
Fiddes, James	Rainy River.	Gillies, Harry	White Lake.
Frawley, Frank	Orillia.	Gordon, Herbert C.	Nelson.
Fisher, George	Sault Ste. Marie.	Gillespie, M. H.	Cook's Mills.
Filiatrault, J. A.	Blind River.	Griffin, William	Huntsville.
Farrier, John William	Chapeau.	Ganton, David	Trout Creek.
Finney, Benjamin B.	Fort Frances.	Graham, George L.	Arnprior.
Follis, Frank C.	Hawkesbury.	Graham, Frederick S.	Arnprior.
Fortune, Percy H.	Blind River.	Gill, Cuthbert	Orillia.
Fraser, Wm. Foster	Sault Ste. Marie.	Graham, James Robert.	Kenora.
Fraser, Allan, H.	Thessalon.	Graham, Thomas Jordan.	Byng Inlet.
Farquharson, James	Tomiko.	Gaudaur, Antoine Daniel.	Orillia.
Fink, John	Mattawa.	Gorman, Patrick	Eganville.
Fletcher, Nicol B.	Parry Sound.	Guy, Charles	Fort Frances.
Fraser, Darlington	Pembroke.	Graham, George H.	Gillies Depot.
Faulkner, Wm.	Dryden.	Greer, George P.	Port Arthur.
Griffith, Geo. F.	Pembroke.	Gill, Charles	Fort Frances.
Graham, John	Arnprior.	Gamey, William H.	Englehart.
Golden, John	Gilmour.	Gorman, Michael J.	Diver.
Gunter, Henry M.	Trenton.	Grier, Roy B.	Kenora.
Goltz, Ernest	Bardsville.	Greer, Samuel H.	Gore Bay.

*Appendix No. 12.—Continued.*LIST OF CULLERS.—*Continued.*

Gilbert, Sidney N.	Rainy River.	Horne, John T.	Fort William.
Guilbeault, A. T.	Klock's Mills.	Hamilton, Chas. E.	Kenora.
Gordon, J. B.	Cache Bay.	Henderson, Leonard	Baysville.
Gorman, Bert	Kenney Siding.	Hunter, Thos.	Callender.
Hale, Thomas	Pembroke.	Hamilton, Robert J.	Ottawa.
Hogan, Albert J.	Sault Ste. Marie.	Hawkins, William A.	Pembroke.
Hagen, Edmund G.	Little Rapids.	Herring, Edward C.	Sebright.
Hagen, Wilson	Thessalon.	Hatch, J. W.	Dryden.
Hurd, Cyrus	Parry Sound.	Hoard, Wm. Paris	Emo.
Henderson, Albert E.	Burford.	Hartman, W. R.	Blind River.
Hale, John B.	Sault Ste. Marie.	Hill, Ernest L.	Hawkesbury.
Hickerson, Melvin T.	Fort Frances.	Hall, Samuel S.	Marmora.
Howey, George H.	Fort Frances.	Hasleton, Constantine	Killaloe.
Hartt, James	Gilmour.	Hamilton, A. J.	Spragge.
Hayes, James	Enterprise.	Heggart, E. C.	Trout Mills.
Humphrey, T. W.	Gravenhurst.	Hunt, Ronald E.	Massey.
Huckson, A. H.	French River.	Hurd, Asahel	Parry Sound.
Handley, Robert	Douglas.	Howe, Peter	Fort Frances.
Howe, Alexander	Queensboro.	Hammond, Samuel H.	Fort Frances.
Hurd, Edwin	Hurdville.	Hunt, Alex. D.	Pearl River.
Huff, J. S. Morris	Arnprior.	Home, John F.	Keewatin.
Halliday, Robert J.	Lindsay.	Hay, Benjamin	Port Arthur.
Hutton, John	Hutton House.	Hogan, John	Savanne.
Hutchinson, Wm. E.	Huntsville.	Hargis, Thomas	Port Arthur.
Hogarth, Joseph Rowan.	Pembroke.	Hartt, I. B.	Orillia.
Humphrey, John	Gravenhurst.	Harkins, J. J.	Keewatin.
Hill, Joshua	Midland.	Hammond, Henry	Dryden.
Hall, David	Lovering.	Hyne, Geo.	Port Arthur.
Hartley, Charles	Peterborough.	Irving, Thos. H.	Parry Sound.
Hawkins, Henry Chas.	Blind River.	Irwin, Eli	Kenora.
Hines, Philip Wallace	Huntsville.	Irving, Edward C.	Kenora.
Hudson, John Lewis	Combermere.	Johnston, Ralph E.	Port Arthur.
Hurdman, William H.	Ottawa.	Johns, Frank A.	Toronto.
Hughes, John	North Bay.	Jackson, Robert	Brechin.
Howie, R. G.	New Liskeard.	Johnson, Finlay	Bracebridge.
Helferty, Dennis	Eganville.	Jones, Albert	Victoria Harbor.
Hamilton, Robert	Kenora.	Johnson, Thomas	Bobcaygeon.
Hoppins, Abiram	Kingston.	Johnston, Archibald M.	Norman.
Hoppins, Densmore	Kingston.	Julien, Charles	Trenton.
Haystead, John	Parry Sound.	Junkin, Henry	Marmora.
Henderson, John Irwin	Bobcaygeon.	Johns, Frank	Nipiss'g Junct'n.
Hartley, William	Millbridge.	Jessup, Edward D.	Cache Bay.
Higgins, John C.	Peterborough.	Johnson, Frank N.	Ottawa.
Harrison, John, Jr.	Pembroke.	Johnston, John	Peninsular Lake.
Hawkins, E.	La Breton Flats.	Johnson, S. M.	Arnprior.
Henderson, Charles	Bracebridge.	Jones, Frederick James.	Flinton.
Halliday, Frank	Parry Sound.	Johnston, William A.	Castleford.
Hammond, W.	Orillia.	Jervis, Henry	Wisawasa.
Hall, Charles Asa	Penetanguishene.	Jones, William	Fenelon Falls.
Hearl, John	Callender.	James, Martin	The Flats.
Howe, Isaac	Fort Frances.	Johnston, James	Fort Frances.
Halliday, James	Springtown.	Johns, Alexander	Callender.
Hurdman, J. A.	Ottawa.	Jackson, John A.	Barwick.
Hawkins, Stonewall J.	Meldrum Bay.	Johnson, Thomas	Fort Frances.
Hinchcliffe, William	Gunter.	Johnston, George N.	North Bay.
Henderson, Arthur	Baysville.	Jamieson, John	Fort Frances.
Hillis, James M.	Sutton West.	Jones, Wellard	Ignace.
Harris, Wm., Jr.	Day Mills.	Kintree, Stuart	Little Rapids.
Hogg, W. J.	North Bay.	Kerby, John	Belleville.
Hoxie, E. P.	Katrine.	Kennedy, Robert	Marmora.
Hawkins, Walter	Pembroke.	Kirby, Louis Russell	Ottawa.
Howard, James	Eganville.	Kennedy, Timothy	Enterprise.
Howard, William	Baysville.	Kirk, Henry	Trenton.
Hogan, Enos W.	Savanne.	Knox, Milton	Ottawa.
		Kinsella, Michael Pierce.	Trenton.

Appendix No. 12.—Continued.

LIST OF CULLERS.—Continued.

Kitchen, D.	French River.	Lowe, Thomas A.	Renfrew.
Kelly, Jeremiah	Sudbury.	Livingston, Robert M. ...	Huntsville.
Kelly, Ferdinand	Mattawa.	Londry, William E.	Sault Ste. Marie.
Kennedy, T. J.	Arnprior.	Labelle, James	Waltham, Que.
Kenning, Henry	Fembroke.	Labelle, Eli	Waltham, Que.
Kirby, D. F.	Belleville.	Ladurante, J. D.	Ottawa.
Kirkpatrick, David	Lindsay.	Ludgate, Theodore	Peterborough.
Kean, John F.	Crillia.	Lucas, Frank	Sault Ste. Marie.
Kellett, Fred.	Keewatin.	Lunam, Duncan	Collfield, Que.
Kelly, Michael J.	Baysville.	Lott, George	Trenton.
Kirk, William James ...	Webbwood.	Lawrie, John D.	Parry Sound.
Kerr, E. G.	Thessalon.	Lovering, George Francis..	Coldwater.
King, Napoleon	Mattawa.	Lucas, R. G.	Christina.
Kemp, Orval Wesley	Trenton.	LeBlanc, Edmund C.	Chapleau.
Kirk, Charles Barron ...	Queensborough.	Lavigne, John	Aylmer, Que.
Kingsland, W. P.	Ottawa.	Landell, Charles S.	Huntsville.
Kerr, John B.	Arnprior.	Long, Henry Elisha	Mattawa.
Kennedy, Walter	Arnprior.	Lynch, W. H.	Collingwood.
Kennedy, John	Pembroke.	Lapante, Francis	Byng Inlet.
Knox, Wm. M.	Fesserton.	Lindsay, James	Arnprior.
Kingston, Robert	Wisawasa.	Labelle, Michael	Arnprior.
Kearnan, Robert	Blind River.	Legree, John	Dacre.
Kearney, Michael John ..	Buckingham, Qu.	Legree, James L.	Calabogie.
Kendrick, John	Burk's Falls.	Leigh, John Chas.	Gravenhurst.
Kendrick, John L.	Burk's Falls.	Lloyd, Edward B.	King.
Kennedy, John W.	Ottawa.	Lemyre, Bruno	Gravenhurst.
Kelly, James F.	Trout Creek.	Lavelle, Charles H.	Canoe Lake.
Kauffman, Julius	Blind River.	Lyons, James	Waltham Sta., Q.
Kennedy, Sylvester	Brule Lake.	Ledwood, Charles	Ottawa.
Kernahan, George A.	Barwick.	Levelle, Emrey	Waltham Sta., Q.
Kehoe, Martin	Huntsville.	Little, Theo.	Kenora.
Kennedy, Daniel J.	Spanish.	Lehman, Joseph	Stratton Station.
Kay, Arthur	Norman.	Lafare, Mark	Cache Bay.
Kennedy, Frederick J. ...	Buckingham, Qu.	Leach, George	Vermilion Bay.
Leannothe, Francis	Arnprior.	Lott, Angus M.	Spanish Mills.
Lee, James	Warren.	La Belle, Ambrose	Kenora.
Lloyd, Alfred	Severn Bridge.	La Breen, Douglas	Kenora.
Lawrie, Frank A.	Parry Sound.	Lavelle, Michael J.	Blind River.
Latimer, Jas.	Frank's Bay.	Lyleton, J. E.	Parry Sound.
Lemyre, Middey	Campbellford.	Lalor, William J.	Aspdin.
Lutz, Jacob	Parry Sound.	Lalonde, Joseph Maxine..	Lirk.
Luby, John E.	Ottawa.	Laderoute, Michael	Arnprior.
Law, Wm. J.	Markstay.	Leroy, Levi H.	Port Arthur.
Lummis, Daniel	Glanmire.	Lusigneau, Arthur	Pembroke.
Lowe, W. C.	Port Arthur.	Link, John	Link P.O.
Londry, S. C.	Sault Ste. Marie.	Love, B.	Port Arthur.
Lochnan, James	Ottawa.	Landry, Fred. S.	Sturgeon Falls.
Link, Henry W.	Ottawa.	Malloy, Mark	Baysville.
Ladarrowe, John	Arnprior.	Martin, Hugh	Sault Ste. Marie.
Lochnan, John	Aylmer, Que.	Miller, R. C.	Gravenhurst.
Lozo, John	Trenton.	Morrison, James	Toronto.
Loughrin, Lawrence	Pembroke.	Murray, Frederick	Huntsville.
Linton, J. H.	Parry Sound.	Mezies, Archibald	Burk's Falls.
Ludgate, James	Peterborough.	Manning, James	Trenton.
Lee, Robert	Huntsville.	Martin, Philip	Stoco.
Langford, Mark	Baysville.	Malone, Wm. Patrick ...	Ottawa.
Letherby, Edwin	Midland.	Marsh, Esli Terrill	Trenton.
Leahy, Francis M.	Chapleau, Que.	Miller, John W.	Huntsville.
Langford, Henry	Baysville.	Muchinbacker, Asa	Rousseau Falls.
Lessard, Philip	Kenora.	Morris, Geo. F.	French Bay.
Lovering, William James.	Coldwater.	Murray, George, Jr.	Waubashene.
Lane, Maurice	Bobcaygeon.	Maughan, Joseph	Fort William.
Lenton, George	Peterborough.	Margach, Wm. J.	Port Arthur.

*Appendix No. 12.—Continued.*LIST OF CULLERS.—*Continued.*

Murray, George, Sr.	Waubashene.	Morrison, Donald	Reay.
Manice, Wm.	Peterborough.	Moore, Wm.	Bobcaygeon.
Murray, Wm.	Kenora.	Mutchenbacker, Herman ..	Rosseau Falls.
Morgan, Richard J.	Kenora.	Moore, Norman	Arnprior.
Magee, Thomas Arthur ..	Kenora.	Morley, John R.	Kenora.
Murdoch, James	Cook's Mills.	Mackay, J. A.	Big Forks.
Mulvahill, Wm.	Arnprior.	Miller, Robt.	Montreal.
Murphy, Arthur	Ottawa.	Mackey, Levi Ralph	Keewatin.
Mayhew, Jacob	Northcote.	Morley, Frank W.	Kenora.
Molyneaux, George	Parry Sound.	Madden, F. M.	Haileybury.
Milway, Joseph	Fort William.	Miller, Walter E.	Owen Sound.
Mackie, Nathan	Port Arthur.	Murray, Robt.	Berriedale.
Milne, Archie	Arnprior.	Mills, W. J.	Cache Bay.
Murray, James	Peterborough.	Martin, Oscar	Buckingham, Que.
Moore, James A. E.	Lakefield.	Margach, Jas. A.	Kenora.
Merkley, William A.	Ottawa.	Murray, Peter	Emo.
Murphy, Hugh R.	Ottawa East.	Macdermid, Harry	Sellwood Jct.
Murphy, W. J.	Arnprior.	Muckle, John	Keewatin.
Murray, William	Markstay.	Morel, H., Jr.	Mattawa.
Martin, Edgerton	Markstay.	Molyneaux, Harold	Parry Sound.
Mathieson, Archie	Fort Frances.	Marchildon, J. P.	Sturgeon Falls.
Moore, Henry R.	Lakefield.	Main, G. C.	Fort Frances.
Mickle, Chas. S.	Gravenhurst.	Marr, H. J.	Superior Jct.
Mullen, James	Webbwood.	Mathewson, O. R.	Blind River.
Morley, A. W.	Winnipeg.	Morel, Adage	Mattawa.
Macdonald, James M.	North Bay.	McCaw, Joseph E.	Tweed.
Money, Harry	Haileybury.	McLaren, Peter	Kenora.
Mather, Allen	Keewatin.	McGregor, Colin F.	Kenora.
Menzies, Alexander	Sault Ste. Marie.	McKenzie, Robt.	Kenora.
Munro, Peter P.	Commanda.	McFadyen, A. J.	Bracebridge.
Mason, Benjamin	Westmeath.	McCaulay, Thos. J.	Goulais Bay.
Monaghan, John B.	Arnprior.	McDonald, John C.	Spanish Mills.
Monaghan, M. J.	Arnprior.	McKenzie, Alex. E.	Ansonia.
Mulvihill, John	Arnprior.	McIntyre, John	Arnprior.
Moran, Andrew	Rockingham, Qu.	McDermott, Thos.	Orillia.
Mulvihill, Michael	Arnprior.	McDermott, Jas. E.	North Bay.
Mann, John	Manitowaning.	McCrindle, Jas.	Sudbury.
Marrigan, Richard	Deseronto.	McGhie, Chas. S.	Whitestone.
Monaghan, John Dorland.	Deseronto.	McGenigal, John H.	Whitby.
Matheson, Wm.	Chelmsford.	McCart, Patrick	Arnprior.
Munro, Alex. G.	Braeside.	McGrath, Thos. B.	Peterborough.
Murphy, Oliver A.	Marksville.	McCormick, James J.	Trenton.
Mellor, Charles	Port Arthur.	McCarthy, Wm.	Fenelon Falls.
Millions, Harry	Gillies Depot.	McAvoy, Owen	Campbellford.
MacDonell, R. D.	Biscotasing.	McConnell, Lewis	Fesserton.
Milne, Fred.	Trout Mills.	McMullen, George	Spragge.
Milne, William H., Jr. ...	North Bay.	McNab, Angus	Burnstown.
Murphy, Dennis	Thessalon.	McColgan, C. H.	Quyon, Que.
Mackie, Thomas	North Lake.	McCallum, Webster	Arnprior.
Miller, P. H.	Blind River.	McFarlane, Robert L. ...	Warren.
Munro, Philip	Braeside.	McCagherty, Robert E. ..	Westmeath.
Mangan, Patrick	Arnprior.	McNab, Archie	Calabogie.
Marcel, Peter	Ottawa.	McDonald, Malcolm	Spragge.
Main, Samuel	Spanish Station.	McIvor, J. A.	Fort Frances.
Morley, Charles	Huntsville.	McCulloch, M.	Kenora.
Moore, David Henry	Peterborough.	McDonagh, Rod.	Callender.
Murphy, John	Arnprior.	McManus, James	Arnprior.
Mathieson, Daniel	Chelmsford.	McKinley, J. H.	Curran.
Milne, Wm.	Ethel.	McPherson, Jas. S.	Rama.
Mangan, Charles	Burk's Falls.	McKinley, Edward C. ...	Toronto.
Mooney, Lincoln	Orillia.	McClelland, John	Parry Sound.
Mangan, John	Arnprior.	McFarlane, J. W.	Cache Bay.
Mooney, Thomas	Kingston.	McDonald, Roderick	Pembroke.
Mason, Robt. T.	Rochester ville.	McCormack, Wm.	Pembroke.
Moore, Wm. John	Gravenhurst.	McCreary, William	Arnprior.
		McCuaig, James C.	Bryson.

*Appendix No. 12.—Continued.*LIST OF CULLERS.—*Continued.*

McColman, Peter	North Bay.	McLean, John	Blind River.
McLeod, James D.	Gravenhurst.	McLeod, Norman	Garden River.
McCrimmon, N. K.	Blind River.	McLean, James	Blind River.
McCreary, James, Jr.	Arnprior.	McNally, J. A.	Desbarats.
McPhee, Hugh	Byng Inlet.	McNab, Alexander	Arnprior.
McCudden, James	Arnprior.	McFarlane, Alexander	Renfrew.
McLachlin, J. A.	Arnprior.	McFarlane, J. D.	Stewartsville.
Macpherson, John	Ottawa.	McFarlane, Duncan	Renfrew.
McEachren, John A.	Gravenhurst W.	McKendry, Wm. B.	Arnprior.
McLeod, Dugald	Gravenhurst.	McPhee, Hugh	Renfrew.
McClelland, R. H.	Parry Sound.	McPhee, John	Arnprior.
McEvoy, Frank	Campbellford.	McLachlin, Peter	Arnprior.
McDermott, Peter	Orillia.	McLachlin, Alexander	Arnprior.
Mellroy, John	Madoc.	Mackey, Edward	Arnprior.
McNab, Robert J.	Parry Sound.	McEwan, Henry	Trenton.
McFadden, James	Ottawa.	McDonald, Alfred	Peterborough.
McIntosh, James G.	Carleton Place.	McGeary, John J.	Sundridge.
McInnis, Hector D.	Bracebridge.	McDonald, Archibald W.	Gilmour.
McKinnon, Malcolm	Bracebridge.	McGaw, John Gillen	Queensborough.
McLean, Daniel	Bracebridge.	McCauley, Barney	Trenton.
McKinnon, Archie J.	Bracebridge.	McDougall, James T.	Klock's Mills.
McKay, D. C.	Baysville.	McInenly, Thomas	Quebec, Que.
McDonald, James	Parry Sound.	McBride, Archibald	Arnprior.
McPherson, Allan	Longford.	McFarlane, Robert L.	Arnprior.
McDonald, James P.	French River.	McGowan, Wm.	Parry Sound.
McFarlane, Jos. C.	Port Severn.	McLachlin, Norman	Arnprior.
McNabb, Alexander	Thessalon.	McDonald, Laughlin	Pendleton.
McGillivray, Archibald ..	Port Arthur.	McIvor, William J.	Collin's Inlet.
McGrane, Edward	Lindsay.	McKee, John P.	Sturgeon Falls.
McLeod, Donald, Jr.	Keewatin.	McGowan, Thomas	Parry Sound.
McDonald, Hector R.	Thessalon.	McDermot, Patrick	South River.
McDougall, Duncan	Bracebridge.	McKay, Angus	South River.
McNabb, Alexander D.	Warren.	McDonald, A. J.	Longford.
McCormack, John C.	Sudbury.	McInnis, Angus D.	Gravenhurst.
McNamara, John	Byng Inlet.	McKendry, Alexander	Waubauskene.
McGillivray, Duncan D.	Algoma Mills.	McGuire, Timothy	North Bay.
McIntyre, Daniel A.	Klock's Mills.	McGrath, John	Peterborough.
McNamara, Lewis	Klock's Mills.	McWilliams, Jno. Bannon.	Peterborough.
McDonald, Sydney C.	Mattawa.	McCagherty, Patrick	Westmeath.
McGurn, John J.	Buckingham, Qu.	McKendry, Daniel	Arnprior.
McKeown, Jno. Joseph ..	Port Arthur.	MacDonald, D. F.	Parry Sound.
McNeel, David	Sault Ste. Marie.	McManus, Thomas J.	Renfrew.
McEwan, Andrew	Thessalon.	Macfarlane, David R.	Ottawa.
McCool, Christopher L.	Cartier.	McColgan, Edward	Quyon, Que.
McCollom, Donald	Arnprior.	McKay, John	Emo.
McDowell, Wm.	Cache Bay.	McKinnon, William	Kenora.
McConnachie, Roy Stewart	Huntsville.	McKittrick, Frank R. F.	Kenora.
McDonnell, J. K.	Kenora.	McMichael, Charles	North Seguin.
McDonald, Alex. J.	Vermilion Bay.	Mellroy, Thomas David ..	Madoc.
McKay, D. A.	Rainy River.	McDonald, Wm. Henry ..	Trenton.
McMillan, James	Kenora.	McGaw, Wm. Thomas ..	Callender.
McPhee, Ronald	Bracebridge.	McMillan, L.	Callender.
McKay, George Donner ..	Dorset.	McDermott, John L.	Orillia.
McWilliams, Maxwell		McDonald, Chas. M.	Pembroke.
Theodore	Peterborough.	McPhee, Benjamin	Pembroke.
McLeod, John	Keewatin.	McGee, John Edward	Parry Sound.
McPherson, George	Keewatin.	Macfarlane, Mack	Arnprior.
McDougall, John D.	Kenora.	MacCallum, Alexander ..	Braeside.
McGregor, Duncan	Burnstown.	McRae, Farquhar	Kenora.
McLean, Peter W.	Sand Point.	MacCallum, Albert	Arnprior.
McNichol, John	Sudbury.	McGonigal, John	Arnprior.
McInnis, D. E.	Cache Bay.	McConachie, John	Huntsville.
McLaughlin, Samuel	Waubauskene.	McKay, D. G.	Kenora.
McCollam, John	North Bay.	McDonald, James	Peterborough.
McManus, John C.	Arnprior.	McCulloch, John L.	Lonsdale.

Appendix No. 12.—Continued.

LIST OF CULLERS.—Continued.

McConnell, James	Mine Centre.	Oliver, J. A.	Fort William.
McIntyre, William John	Port Arthur.	Owen, W. J.	Wabigoon.
McDonald, Allen	Big Forks.	O'Connor, John	Hintonburg.
McLay, Albert	Devlin.	Oliver, Darcy	Wahnapiatae.
McQuarrie, Daniel	Fort Frances.	O'Connor, Wm.	Nozbonsing.
McNaughton, Daniel	Bracebridge.	O'Neil, James W.	North Bay.
McCagherty, William E.	Westmeath.	O'Donnell, Wm.	Fenetanguishene.
McDonald, John D.	Mattawa.	Owens, Richard	Basin Depot.
McCagherty, Joseph T.	Westmeath.	O'Reilly, Patrick	Cartier.
McAdam, Arch. H.	Quyon, Que.	O'Neill, Mark	Renfrew.
McMurphy, Dugald, Jr.	Kenora.	Orrill, John	Trenton.
McCall, Alfred	Kenora.	O'Neill, Patrick	Bancroft.
McRitchie, William	Kenora.	Orde, Francis W.	Kenora.
McKitchie, Malcolm	Kenora.	O'Driscoll, Joseph	Sault Ste. Marie.
McDonald, John Harold	Rydal Bank.	O'Gorman, Peter	Blind River.
McAuley, William Davis	Sault Ste. Marie.	Ogden, L. M.	Fort Frances.
McCallum, Thomas	Fort William.	Pigott, John	Fitzroy Harbour.
McWhinney, Fred	Kenora.	Paul, Charles A.	Sault Ste. Marie.
McNairney, Hugh H.	Sudbury.	Patinson, Thos.	Bracebridge.
McKelvie, William	Otter Lake Sta.	Price, A. E.	Arnprior.
McGovern, Frank	Sault Ste. Marie.	Presley, J. F.	Ashton.
McCallum, Gordon	Fort Frances.	Power, James	Bobcaygeon.
McCallum, Henry	Fort Frances.	Patzel, Adolph	Arnprior.
McLaughlin, Russell	Spanish Mills.	Plaunt, William B.	Eganville.
McAdam, Miner S.	Quio, Que.	Plaunt, Joseph	Eganville.
McDougall, David A.	Nesterville.	Porter, Charles C.	Longford.
McLeod, William A.	Manitowaning.	Preston, R. E.	Kenora.
McKee, D. A.	Wylie.	Petrie, Geo. A.	Fergus.
McKay, Norman	Fort Frances.	Pomeroy, Peter	Trenton.
McIntosh, Wm.	Biscotasing.	Perry, Pringle K.	Byng Inlet, N'th.
McMahon, Edwin	Nesto, P.O.	Purcall, W. G.	Ottawa.
McGowan, Thos.	Parry Sound.	Purvis, John	Parry Sound.
McDonald, Norman	Keewatin.	Porter, James	Uphill.
McLeod, John C.	Port Arthur.	Pearson, John James	Lindsay.
McIntosh, Herbert	Biscotasing.	Penney, Chas. G.	Cache Bay.
McDonald, Thos.	Kenora.	Pennock, James P.	Hardwood Lake.
McCool, Daniel	Sudbury.	Purdy, John A.	Uxbridge.
McDonald, Frank	Mattawa.	Playfair, R. J.	Blind River.
McLeod, E. H.	Nepigon.	Paterson, John	Wahnapiatae.
Nescott, George	Kenora.	Paterson, Alexander	Orillia.
Newton, Frank	Gravenhurst.	Parke, James	Gravenhurst.
Newburn, Wm.	Parry Sound.	Parquette, Oliver	Webbwood.
Niblett, James	Arnprior.	Palmateer, Sherman	Gravenhurst.
Nisbett, Robert	Osceola.	Paget, George	Huntsville.
Nevison, Herbert	Kenora.	Pounder, Joseph	Westmeath.
Nicholson, John	Owen Sound.	Pell, Richard D.	Arnprior.
Newall, John H.	Parry Harbour.	Perry, Frederick	Port Arthur.
Nolan, John	Gravenhurst.	Paget, Charles Edward	Novar.
Newton, Charles W.	Victoria Harbour.	Porter, Thos. Robt. Mark	Dorset.
Nent, Charles	Vermilion Bay.	Pountney, E. J.	Arnprior.
Needham, John G.	Pakenham.	Pyburn, David J.	Dorset.
Netterfield, David	John's Island.	Purdy, Geo.	Hintonburg.
Nault, James	Fort Frances.	Playfair, Andrew Wm.	Sault Ste. Marie.
Norgate, Chas.	Dryden.	Pipe, Taylor	Haileybury.
Nash, John	Kenora.	Pipher, George E.	Mowat.
Nesbitt, Thos.	Kenora.	Pendee, David	Farry Sound.
Oullette, Joseph P.	Cutler.	Piper, A. J.	Blind River.
O'Neil, Thomas	Bancroft.	Paget, Alfred H.	Ahmie Harbour.
O'Neill, Daniel H. H.	Arnprior.	Powers, John J.	Trout Mills.
O'Leary, Patrick J.	Orillia.	Pigott, William D.	Fitzroy Harbour.
Oliver, Charles R.	Fesserton.	Potts, Cyril	North Lake.
Overend, George J.	Longford Mills.	Pilkey, William	La Vallee.
O'Brien, Andrew	Ottawa.	Pointer, Roy R.	Pembroke.
O'Brien, Frank G.	Arnprior.	Piper, Roy	Blind River.

*Appendix No. 12.—Continued.*LIST OF CULLERS.—*Continued.*

Pehill, Walter	Dryden.	Robinson, Thos. Geo.	Bracebridge.
Palmer, Fred.	Blind River.	Rooksby, Wm.	Campbellford.
Quinn, William	Peterborough.	Ramesbottom, Robt.	Byng Inlet.
Quigley, Hugh	Penetang.	Roy, Lewis	Arnprior.
Quirk, Thomas J.	Petawawa.	Riddell, Horace A.	Galetta.
Quance, Louis F.	Berriedale.	Rowan, A. L.	Sault Ste. Marie.
Robertson, D.	Kenora.	Ritchie, James A.	Spragge.
Richardson, Fred'k George	Trenton.	Ross, George Joseph	Schreiber.
Richards, Richard	Tamworth.	Rowe, Frank E.	Hymers.
Riddell, Geo. Alexander ..	Rochesterville.	Regmibal, J. Hector	Larchwood.
Robertson, Lewis McLean ..	Dunchurch.	Reid, William T.	Fort Frances.
Robinson, Wm. F.	Bobcaygeon.	Ross, Sidney	Fort William.
Reamsbottom, Wm.	Mattawa.	Robinson, Thos.	Kenora.
Richey, Evan	Brentwood.	Robertson, J. D.	Kenora.
Randall, Lewis G.	French River.	Richardson, C. R.	Fort Frances.
Richardson, Chas. Marvyn ..	Trenton.	Richey, A. W.	Sudbury.
Rochester, Daniel Baillie ..	Ottawa.	Robinson, W. J.	Dryden.
Riddell, James	Ottawa.	Smith, M. D.	Fort William.
Rice, Asa S.	Hull, Que.	Scanlan, William	Enterprise.
Roberts, T. A.	Huntsville.	Sutherland, D. H.	Gravenhurst.
Ross, Andrew	Longford Mills.	Spanner, John	Huntsville.
Rose, Donald M.	Kenora.	Shier, James D.	Bracebridge.
Rawson, Charles Edward ..	Coldwater.	Spooner, W. R.	Katrine.
Ross, George	Waubushene.	Simpson, Alfred E.	Wakefield.
Roberts, Percy T.	Keewatin.	Souliere, John B.	Ottawa.
Ritchie, Wm. D.	Little Current.	Shields, James A.	Carleton Place.
Ramsay, Robert	Arnprior.	Spargo, George	Ottawa.
Ritchie, J. F.	Arnprior.	Smyth, W. H.	Baysville.
Ritter, Samuel G.	Ahmic Harbour.	Salmon, R. H.	Byng Inlet North.
Rothera, Charles F.	Sturgeon Falls.	Salmon, Alexander C. ..	Baysville.
Ryan, Alfred	Byng Inlet.	Stremer, A.	Ottawa.
Rogers, Fred.	Sault Ste. Marie.	Shields, Frank A.	Parry Sound.
Reid, George William	Fort Frances.	Stapleton, John J.	Ogidakie.
Robertson, John A.	Kenora.	Sloan, William H.	Fort Frances.
Robinson, Wm.	Bobcaygeon.	Smyth, Job E.	Cache Bay.
Reid, Joseph B.	Lindsay.	Sage, Nelson	Muskoka Mills.
Ross, Walter M.	Ottawa.	Seymour, Edward	Whitefish.
Ruttle, H. A.	Carleton Place.	Shaw, Thomas B.	Waubushene.
Richards, Benedict	Ottawa.	Swanston, James	Peterborough.
Regan, John	Orillia.	Simpson, William	Hall's Bridge.
Russel, Wm.	Pembroke.	Sadler, Thomas	Lindsay.
Ramsay, Charles	Sudbury.	Smith, Patrick Albert ..	Norman.
Russell, Corsan L.	Pembroke.	Snaith, William J.	Mattawa.
Richards, Henry	Dacre.	Sinn, William F.	Arnprior.
Ryan, Wm.	Killaloe.	Sheppard Wm. Joseph ..	Wautauskene.
Reid, John P.	Spanish Mills.	Spears, Milton B.	Barry's Bay.
Ridley, Robert	New Liskeard.	Stevenson, Arthur	Peterborough.
Riley, Charles W.	Hutton House.	Stein, Paul	Sault Ste. Marie.
Raymond, Morris T.	Spanish Mills.	Shaw, Alfred	Thessalon.
Rooney, Wm. H.	Campbellford.	Sequin, Napoleon	Spanish Station.
Revell, J. O.	Dryden.	Scrim, Robert	Arnprior.
Rankin, Anthony	Cache Bay.	Sharp, James A.	Sudbury.
Ross, Angus	Crrville.	Shaney, Harry S.	Cook's Mills.
Robinson, Albert E.	Washago.	Smith, Wm.	Ottawa.
Robinson, Edward	Washago.	Stewart, Daniel	Braeside.
Robinson, Thomas G.	Washago.	Sheehan, Michael H.	Waubushene.
Raycroft, William T.	Sarnia.	Smith, Sydney H.	Bracebridge.
Roberts, Ivor M.	Garden River.	Stewart, James A.	Pembroke.
Revell, Lionel Oliver	W. Gravenhurst.	Sproule, Newton H.	Schomberg.
Regan, Judd Patrick	Orillia.	Simmons, Alex.	Port Arthur.
Robins, Etna Rosedale ..	Orillia.	Scott, Thomas	Parry Sound.
Regan, John, Jr.	Orillia.	Smith, Lawrence	W. Sarnia.
Ryan, James	Savanne.	Shea, Stewart	Campbellford.
Rusk, Oscar W.	Cache Bay.	Sullivan, John	Sault Ste. Marie.

*Appendix No. 12.—Continued.*LIST OF CULLERS.—*Continued.*

Sinclair, Finlay	Sudbury.	Spense, Dalton	Farry Sound.
Shiels, Henry F.	Cartier.	Sparling, S. W.	Richan.
Smith, Gideon Ousley ...	Burk's Falls.	Smith, L. G.	Worthington.
Smith, John Wallis	Thedford.	Skead, Eric S.	Spanish Mills.
Smith, Henry G.	Arnprior.	Sullivan, Michael	Barry's Bay.
Story, John A.	Ottawa.	Swale, William	Gillies Depot.
Sweezy, Benjamin	Massey.	Schreiber, C. C.	Sudbury.
Sheppard, Charles H. ...	Coldwater.	Shirfield, Wm. Chas. ...	Dryden.
Seabrook, Alex.	Fabre P.O.	Taylor, Fred. L.	Parry Sound.
Spreadborough, Newlands.	Little Current.	Thomas, Griff J.	Thessalon.
Sheffield, George	Chapleau.	Thomson, R. D.	Biscotasing.
Sanders, William J.	Sudbury.	Tait, Thomas B.	Burk's Falls.
Sinclair, Armon D.	Arnprior.	Taylor, C. M.	Gravenhurst.
Smith, Sidney E.	Ottawa.	Thornton, W. D.	Longford Mills.
Sleeman, Wm.	Rapid River.	Trussler, Gilbert	Trout Creek.
Sheehan, Peter F.	Loring (canc'd).	Thompson, Geo. S.	Lindsay.
Sleeman, Geo.	Rapid River.	Thompson, Fred. A. H. ...	Nosbonsing.
Sims, Wm. K.	Sault Ste. Marie.	Thompson, Francis Hy...	Nosbonsing.
Skahill, Wm.	Blind River.	Train, A. C.	Rowan Mills.
Shaw, George	Thessalon.	Turgeon, Geo.	Cook's Mills.
Sarsfield, George Francis.	Sault Ste. Marie.	Thayer, Wm.	Sault Ste. Marie.
Standish, Wm. H.	Batchawanning.	Thompson, Alexander W..	Arnprior.
Simpson, Wm. A.	Lakefield. [Bay.	Taylor, Thos. G.	Gravenhurst.
Scollard, Wm.	Young's Point.	Trowse, A.	Arnprior.
Shuttleworth, Alma	Trout Creek.	Tucker, Louis A.	Fort Frances.
Shanacy, Wm. J.	Spragge.	Thompson, Daniel	P't'ge du F'rt, Q.
Seely, George	Arnprior.	Thompson, Richard	Kenora.
Stewart, Alex. W.	Lanark.	Thompson, Joseph H. ...	Bracebridge.
Soreny, Wm.	Braeside.	Taylor, Edward A.	Westmeath.
Schneder, Frederick	Cache Bay.	Tait, Ralph	Arnprior.
Smith, James D.	Kenora.	Train, William	Burk's Falls.
Sullivan, James	Aylmer.	Turner, Garvin F.	North Bay.
Scully, Cornelius	Whitney.	Tilson, Joseph	Burk's Falls.
Savoy, Eutrope	North Bay.	Tuffy, John	Cartier.
Smith, Walter J.	Campbellford.	Thorpe, Thomas	Pembroke.
Seymour, John J.	Whitefish.	Taylor, Charles E.	Gravenhurst.
Smith, Alex. R. C.	Burk's Falls.	Tench, Arthur	Hekkla.
Stewart, Richard M.	Chelsea, Que.	Tulloch, William A.	Sault Ste. Marie.
Souliere, John H.	Cance Lake.	Taylor, Alex. M.	Burnstown.
Smith, Abraim G.	Quyon, Que.	Toner, J. A.	P't'ge du F'rt, Q.
Swallow, C. H.	Day Mills.	Thrasher, Henry G.	Pembroke.
Strave, A. M.	Mine Centre.	Tooke, Frank	Bala.
Stewart, John	Fort Frances.	Thorburn, Donald James..	Thessalon.
Sullivan, George L.	Rainy River.	Tetreault, Philias	Tomiko.
Short, James	Kenora.	Tibbets, L. R.	Fort Frances.
Shaw, Fred. Jason	Thessalon.	Tichborne, A. C.	Fort Frances.
Short, Chas. J.	Kenora.	Thomson, Donald	Arnprior.
Smith, David H.	Sudbury.	Udy, Dean	French River.
St. Hillaire, George	Arnprior.	Urquhart, Elias	Gravenhurst.
Souliere, Joseph C.	Cutler.	Urquhart, Andrew	Barrie.
Scott, J. C.	Fort Frances.	Vigrass, Percy J.	Dufferin Bridge.
Stewart, Frank E.	Crozier.	Vincent, Joseph	Warren.
Sanders, Edward	Barwick.	Vollin, Samuel	Nosbonsing.
Spence, William	Arnprior.	Vannier, Nelson Joseph..	Bobcaygeon.
Scott, Allan A.	Norman.	Vincent, James	Fesserton.
Souliere, Max	Spanish Mills.	Vincent, Henry T.	Port Sidney.
Stewart, David	Cache Bay.	Vanderburg, Norman	Wisawasa.
Shaw, Donald	Keewatin.	Valois, Armand	Mattawa.
Smyth, C. W.	Fort Frances.	Villiers, Claude	Parry Sound.
Stewart, Jas. Max	Winnipeg, Man.	Vanier, John	Sault Ste. Marie.
Stewart, Russell C.	Winnipeg, Man.	White, Thomas S.	Bracebridge.
Sisson, Heber P.	Hymers.	White, A. Thomson	Pembroke.
Schultz, Albert	Pembroke.	Watt, R. A.	Spanish.
Spavin, John	Westmeath.	Wilkins, Hughes	Blind River.

*Appendix No. 12.—Concluded.*LIST OF CULLERS.—*Concluded.*

Wallace, T. William	Blind River.	Watterworth, J. A.	Sault Ste. Marie.
White, Joseph W.	Bracebridge.	White, Wm. James	Muskoka Falls.
Watson, William	Huntsville.	Warrell, George	Powassan.
Webb, George W.	Farry Sound.	Wells, George W.	Little Current.
Wilcox, Thomas	Parry Sound.	Wilson, Frederick Gould	Kenora.
Wheeler, J. A. McL.	Tamworth.	Wallace, John Thomas	Thessalon.
Widdifield, C. H.	Pine Orchard.	Wilkins, George N.	Baysville.
Whitmore, Edgar	Rosseau Falls.	Wylie, Byron M.	Webbwood.
Wright, L. B.	Sault Ste. Marie.	White, Allan	Pembroke.
Ward, Joseph W.	Ottawa.	Warner, Franklin H.	Fort Frances.
Wilkinson, W.	French River.	Watts, George	Fort Frances.
Waldie, John E.	Victoria Harbour.	Wood, Thomas	Farry Sound.
Wigg, Thomas G.	Thessalon.	White, William	Peterborough.
Wall, Patrick B.	Cheboygan, Mich.	Woods, A. L.	Kenora.
Wells, John R.	Little Current.	White, John B.	Kippewa, Que.
Whiteside, John	Huntsville.	Whelan, Peter M.	Renfrew.
Watt, William	Peterborough.	Wilson, David	Kearney.
Wilson, George	Lindsay.	Weston, Cecil	Dorset.
White, Thomas	Parry Sound.	Wilkins, George E.	Dorset.
Wood, William D.	Sault Ste. Marie.	Woodcock, Edward	Brownhill.
Watts, John J.	Fort Frances.	Wilson, Fred.	Callender.
Webster, George F.	Fort Frances.	Wilson, Alexander R.	Thessalon.
Wright, Percy	Fort Frances.	Webster, Henry R.	North Lake.
Watts, William B.	Fort Frances.	Wallace, Fred. R.	Port Arthur.
Watson, William	North Bay.	Wallace, Clayton	Blind River.
Wagner, Fred.	Kenora.	Wilson, Russell	Pembroke.
Wainwright, Edward C.	Huntsville.	Wheeler, George	Barwick.
Wilson, Wm. James	Deseronto.	Wall, G. L.	La Vallee.
Weston, Frank R.	Midland.	Williams, Edward R.	Port Arthur.
White, James B.	Manitowaning.	Whalen, Jos.	Pembroke.
Warren, Robert M.	Cache Bay.	Wood, W. G. A.	Porcupine.
Wilson, George A.	Balsam Hill.	Younge, Harvey D.	Fort Frances.
Welch, Harold	Milberta.	Young, R. H.	Fort Frances.
Wilson, James A., Jr.	Webbwood.	Yuill, John Albert	Braeside.
Woods, John R.	Antrim.	Young, William	Severn Bridge.
Wardell, Ernest C. S.	Victoria Harbour.	Young, A. J.	Cache Bay.
Woods, Joseph F.	Roach's Point.	Young, Samuel	Coldwater.
Whaley, Thomas	Huntsville.	Young, Patrick P.	Young's Point.
Webster, Wm. Alfred	Bracebridge.	Young, Francis G.	Young's Point.
Worns Dorf, Fred. Gutlep	Pembroke.	Yuill, Thomas	Arnprior.
Warrell, Wm.	Trout Creek.	Yuill, A. D.	Braeside.
Wims, Peter	Blessington.	Young, C. T.	Harvey.
Wickware, Philip Almont.	Cloyne.	Yuill, John Alex.	Arnprior.
Wilson, Edward	Deseronto.	Yuill, Archibald	Bracebridge.
Whelan, P. J.	McDougall.	Yuill, William	Braeside.
Whyte, John, Thos. Goth.	Ottawa.	Young, Walter D.	Whitefish.

Appendix No. 13.

RECORDS BRANCH, 1916-17.

Communications Received:

From Crown Land Agents	7,642
“ Mining Recorders	3,602
“ Crown Timber Agents	3,566
“ Homestead Inspectors	1,391
“ Fire Rangers	2,666
“ Superintendent, Algonquin Park	403
“ Superintendent, Quetico Park	127
Orders-in-Council	191
Telegrams	224
Nickel Commission (letters)	1,025
Northern Development Branch	5,699
Colonization Branch	7,244
Loan Commissioner	6,532
Mining Commissioner	2,016
Forestry Branch (direct)	2,151
Mine Assessor	2,057
Mine Inspector	801
Provincial Geologist	625
All other sources	31,637
Total pieces, incoming (Minister's office excluded)	79,599

Communications Sent Out:

To Crown Agents, Inspectors, Rangers and Park Superintendents	20,063
To general public	20,890
Circular letters (timber sales)	1,620
Maps and blue prints	2,803
Mining Reports to foreign countries	295
Mining Acts	1,415
Nickel Commission (letters)	1,016
Nickel Commission (reports—home and foreign)	2,300
Northern Development Branch (letters)	5,442
Northern Development Branch (seed grain)	967
Colonization Branch (letters)	7,680
Colonization Branch (books, maps and calendars)	68,987
Loan Commissioner	6,740
Mining Commissioner	3,614
Forestry Branch (including circular letters)	7,503
Mine Assessor	2,050
Mine Inspector (letters)	871
Mine Inspector (reports, etc.)	104
Provincial Geologist (including circular letters)	991
Total pieces, outgoing (Minister's office excluded)	155,351

Postage:

Postage for the year, Records Branch	\$3,288 58
“ “ “ Colonization Branch	957 92
“ “ “ Loan Commissioner	290 54

Files:

New files issued, general	8,650
“ “ “ accounts chargeable	493
“ “ “ accounts free	218

S. K. BURDIN,
Chief Clerk, Records Branch.

ALBERT GRIGG,
Deputy Minister

Appendix No. 14.

Statement showing the number of Locatees and of acres located; of purchasers and of acres sold; of lots resumed for non-performance of the settlement duties and of patents issued in Free Grant Townships during the year ending 31st October, 1917.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of persons cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Baxter	Muskoka.	J. B. Brown, Brace-	....	....	7	206	....	....	14	313
Brunel	"	" bridge	1	100	....	....	1	100	....	....
Cardwell	"	"	1	100	....	....	1	100	....	....
Chaffey	"	"	4	350	....	....	4	350	....	....
Draper	"	"	1	195	....	....	1	195	....	....
Franklin	"	"	4	396	1	433	3	289	4	256
Freeman .....	"	"	....	....	....	....	....	....	....	....
Macaulay .....	"	"	....	....	....	....	....	....	....	....
Medora .....	"	"	....	....	....	....	....	....	....	....
Monck .....	"	"	....	....	....	....	....	....	....	....
Morrison	"	"	1	100	....	....	....	....	3	283
Muskoka .....	"	"	....	....	....	....	....	....	1	101
McLean	"	"	1	100	....	....	1	160	1	100
Oakley	"	"	1	100	....	....	1	100	2	142
Ridout .....	"	"	....	....	....	....	....	....	1	57
Ryde .....	"	"	....	....	....	....	....	....	....	....
Sherborne .....	"	"	....	....	....	....	....	....	....	....
Sinclair	"	"	1	38	....	....	....	....	2	166½
Stephenson	"	"	1	100	....	....	5	485	....	....
Stisted	"	"	2	204	....	....	2	204	1	104
Watt	"	"	1	11	....	....	1	11	1	32
Wood	"	"	1	198	8	38	2	208	9	89
Blair	Parry Sound..	Miss I. M. Campbell,	....	....	4	15	....	....	5	18
Burpee	"	" Parry Sound	1	200	....	....	....	....	1	98
Carling	"	"	6	660	....	....	3	261	5	213
Christie	"	"	1	98	....	....	1	202	4	674
Conger	"	"	3	507	....	....	3	507	1	4½
Cowper .....	"	"	....	....	....	....	....	....	2	10
Foley	"	"	2	175	....	....	....	....	....	....
Ferguson	"	"	2	200	....	....	3	300	....	....
Hagerman .....	"	"	....	....	....	....	....	....	1	197
Harrison .....	"	"	....	....	....	....	....	....	2	2
Henvey .....	"	"	....	....	....	....	....	....	....	....
Humphrey	"	"	2	283	1	43	1	143	2	390
McConkey	"	"	1	135	1	1	3	326	2	245
McDougall	"	"	3	302	2	2	2	202	1	100
McKellar	"	"	1	99	....	....	1	99	....	....
McKenzie .....	"	"	....	....	....	....	1	200	1	100
Monteith	"	"	6	661	3	244	4	401	1	229
Shawwanaga .....	"	"	....	....	....	....	....	....	1	17
Wilson	"	"	1	200	....	....	1	200	....	....
Chapman	Parry Sound .	Dr. J. S. Freeborn,	5	598	....	....	4	399	1	200
Croft	"	" Magnetawan	3	343	....	....	2	243	3	489
Ferrie .....	"	"	....	....	....	....	....	....	....	....
Gurd	"	"	1	100	....	....	1	100	2	328
Lount	"	"	1	100	1	2	....	....	4	403
Machar	"	"	4	613	....	....	3	215	2	276
Mills	"	"	1	100	....	....	1	100	1	100
Pringle	"	"	2	200	2	101	2	200	4	601

Appendix No. 14.—Continued.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of persons cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Ryerson.....	Parry Sound..	Dr. J. S. Freeborn, Magnetawan	1	200			1	200	1	100
Spence	"	"								
Strong	"	"								
Armour.....	Parry Sound..	W. Jenkin, Emsdale..							2	104½
Bethune	"	"							2	394
Joly	"	"	3	391			3	391	2	190
McMurrich...	"	"	3	218			3	218	3	567
Perry	"	"							1	200
Proudfoot....	"	"	1	100			1	100		
Hardy	Parry Sound..	H. J. Ellis, Powassan.					1	201	1	198
Himsworth ..	"	"	5	611			6	611	4	522
Laurier	"	"	2	300			1	200		
Nipissing	"	"	4	331			1	100		
Patterson....	"	"							2	257
Bonfield....	Nipissing	W. J. Parsons, North	5	375			4	325	6	470
Boulter	"	" Bay	3	402					3	8,150
Chisholm	"	"	3	315	1	6½	2	195	5	120
Ferris	"	"	7	503			5	412	7	442
Anson	Haliburton ..	R. H. Baker, Minden..								
Glamorgan ..	"	"	1	100			1	100		
Hindon	"	"								
Lutterworth..	"	"	2	177			1	87	1	90
Minden	"	"	3	305					3	191
Snowdon	"	"	1	146			2	146	2	198
Stanhope....	"	"								
Anstruther ...	Peterborough.	William Hales, Apsley							1	100
Burleigh, N.D.	"	"	1	94			1	200	1	92
" S.D.	"	"	1	175						
Chandos	"	"	1	100			2	200		
Methuen	"	"	1	125						
Cardiff.....	Haliburton ...	A. N. Wilson, Kinmount	1	100			2	200	1	200
Cavendish....	Peterborough.	"	1	155	1	49	2	327		
Galway	"	"	1	127					2	302
Monmouth ...	Haliburton ...	"	5	404	1	12	7	750	3	494
Bangor	Hastings	W. J. Douglas, Green-	2	168						
Carlow	"	" view	4	551½	1	80	3	339½	1	193
Cashel	"	"	1	100			2	200	2	200
Dungannon ..	"	"	2	199			2	199	2	439
Faraday	"	"	3	442			3	442	1	202½
Herschel	"	"	7	692	1	63¾	2	195	5	548
Limerick....	"	"	1	100						
Mayo	"	"	1	129	2	43			5	1,312
Monteagle ...	"	"	8	734			2	201	7	916
McClure	"	"	2	288			1	105	1	98
Wicklow	"	"	7	661	1	5	1	100	2	379
Wollaston....	"	"	1	147½			2	147½	2	258½
Algona, S.....	Renfrew	Adam Prince, Renfrew								
Brougham ...	"	"	5	654½	3	210	3	292	10	667
Brudenell	"	"	2	136			1	46		
Burns	"	"								

Appendix No. 14.—Continued.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of persons cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Grattan	Renfrew	Adam Prince, Renfrew	3	281	.....	.....	.....	.....	3	251
Griffith	"	"	1	93	.....	.....	.....	.....	.....	.....
Hagarty	"	"	2	152½	1	26	.....	.....	5	181
Jones	"	"	2	298	.....	.....	.....	.....	.....	.....
Lyell	"	"	1	101	.....	.....	1	200	2	294
Lyndoch	"	"	2	316	1	400	1	106	2	600
Matawatchesan.	"	"	2	198	.....	.....	.....	.....	1	100
Radcliffe .....	"	"	.....	.....	.....	.....	.....	.....	.....	.....
Raglan .....	"	"	.....	.....	.....	.....	6	657	2	555
Richards	"	"	4	509	1	149	1	105	6	222
Sebastopol ..	"	"	1	82	.....	.....	.....	.....	.....	.....
Sherwood	"	"	3	238	.....	.....	1	86	.....	.....
Algonia, N....	Renfrew	Finlay Watt, Pembroke	1	103	.....	.....	.....	.....	.....	.....
Alice	"	"	1	109	.....	.....	.....	.....	3	350
Buchanan	"	"	1	168	.....	.....	.....	.....	.....	.....
Fraser	"	"	1	101	.....	.....	.....	.....	.....	.....
Head .....	"	"	.....	.....	.....	.....	.....	.....	.....	.....
Maria .....	"	"	.....	.....	.....	.....	.....	.....	.....	.....
McKay .....	"	"	.....	.....	.....	.....	1	102	.....	.....
Petawawa	"	"	1	102	.....	.....	1	100	.....	.....
Rolph	"	"	1	100	.....	.....	.....	.....	.....	.....
Wilberforce ..	"	"	.....	.....	.....	.....	.....	.....	.....	.....
Wylie (pt.) ...	"	"	.....	.....	.....	.....	.....	.....	.....	.....
Calvin	Nipissing	Robt. Small, Mattawa	1	200	.....	.....	1	200	6	569
Cameron (pt.).	"	"	17	2,029	2	98	5	476	1	236
Lauder .....	"	"	.....	.....	.....	.....	.....	.....	.....	.....
Mattawan.....	"	"	.....	.....	.....	.....	.....	.....	2	334
Papineau	"	"	2	300	.....	.....	3	300	4	501
Korah	Algoma	Edward Noble, Sault	1	80	.....	.....	.....	.....	.....	.....
Parke	"	Ste. Marie	.....	.....	.....	.....	.....	.....	1	80
Prince	"	"	4	503	1	161	5	645	.....	.....
Aberdeen	Algoma	Thos. Dodds, Thessalon	3	399¾	.....	.....	2	348½	1	127½
" add.	"	"	.....	.....	.....	.....	.....	.....	.....	.....
Galbraith	"	"	2	361	2	22½	.....	.....	3	490
Lefroy .....	"	"	.....	.....	.....	.....	.....	.....	.....	.....
Plummer .....	"	"	.....	.....	.....	.....	.....	.....	.....	.....
" add.	"	"	.....	.....	.....	.....	.....	.....	.....	.....
St. Joseph Is'd	Algoma	W. E. Whybourne,	.....	.....	.....	.....	.....	.....	.....	.....
St. Joseph	.....	Marksville	11	1,123½	.....	.....	9	776½	6	543
Ch'nl Is'd	.....	"	.....	.....	.....	.....	.....	.....	1	5
Baldwin.....	Algoma	Edward Arthurs,	.....	.....	1	40½	.....	.....	1	40
Merritt.....	"	Espanola	1	150	.....	.....	1	150	1	160½
Blake	Thunder Bay.	W. A. Burrows, Port	1	160	.....	.....	2	320	5	720
Coumsee	"	Arthur	4	446½	3	41	3	284	12	1,142
Crooks	"	"	5	658	.....	.....	7	913	5	816
Dawson Road.	"	"	18	1,633½	5	165	18	1,412	4	377
Dorion	"	"	4	638½	.....	.....	4	560	2	312½
Gillies	"	"	1	200	.....	.....	1	160	1	56
Gorham	"	"	4	552½	2	135	2	270	8	1,210
Lybster	"	"	3	336½	1	294	2	314½	3	492
Marks	"	"	1	156½	2	159½	5	779	3	476
McGregor	"	"	7	1,107	2	84	62	9,877½	.....	.....
McIntyre .....	"	"	.....	.....	.....	.....	.....	.....	3	462
O'Connor.....	"	"	.....	.....	4	10½	.....	.....	7	1,051

Appendix No. 14.—Continued.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of persons cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Oliver.....	Thunder Bay..	W. A. Burrows, Port	2	321 $\frac{1}{2}$	2	4	1	162	4	481
Paipoonge, N R	"	" Arthur	...	...	...	...	...	...	1	130
" S R	"	"	...	...	...	...	...	...	1	100
Pardee.....	"	"	1	160	1	80	1	160	...	...
Pearson.....	"	"	9	1,403 $\frac{3}{4}$	2	93 $\frac{1}{4}$	8	1,315 $\frac{1}{2}$	1	160 $\frac{1}{2}$
Scoble.....	"	"	7	686 $\frac{1}{2}$	1	161 $\frac{1}{2}$	13	1,806	3	429
Stirling.....	"	"	11	1,531	...	...	7	1,040 $\frac{1}{2}$	...	...
Strange.....	"	"	4	628 $\frac{1}{2}$	...	...	4	627 $\frac{1}{2}$	1	157
Ware.....	"	"	10	1,551 $\frac{1}{2}$	1	53	4	635 $\frac{1}{2}$	6	1,164 $\frac{1}{2}$
Atwood.....	Rainy River..	William Cameron,	...	...	...	...	...	...	...	...
Blue.....	"	" Stratton	3	367	...	...	5	531	...	...
Curran.....	"	"	1	164	1	2	2	324	1	162
Dewart.....	"	"	3	480	1	2	3	486	...	...
Dilke.....	"	"	...	...	...	...	...	...	...	...
Morley.....	"	"	3	322	2	4	3	322	2	324
Morson.....	"	"	12	1,561 $\frac{1}{2}$	...	...	16	1,630	2	166
McCrosson...	"	"	6	801 $\frac{3}{4}$	2	5 $\frac{1}{2}$	7	918	7	1,108 $\frac{1}{2}$
Nelles.....	"	"	4	648	2	84	6	968	3	485
Pattullo.....	"	"	7	800	3	12	6	719	3	409
Pratt.....	"	"	1	162	1	44 $\frac{3}{4}$	1	159 $\frac{1}{2}$	4	530
Rosebery...	"	"	...	...	...	...	...	...	...	...
Shenston.....	"	"	...	...	...	...	...	...	...	...
Sifton.....	"	"	11	1,246 $\frac{1}{2}$	...	...	6	1,008 $\frac{1}{2}$	4	589
Spohn.....	"	"	7	1,074 $\frac{3}{4}$	1	29	9	1,310 $\frac{1}{2}$	4	544
Sutherland...	"	"	5	797 $\frac{1}{2}$	1	45 $\frac{1}{2}$	6	958	1	203 $\frac{1}{2}$
Tait.....	"	"	8	949	4	242 $\frac{1}{2}$	3	488	1	160
Tovell.....	"	"	5	859	1	79 $\frac{1}{4}$	7	970	2	325
Worthington..	"	"	...	...	...	...	1	81	3	350
Aylsworth...	Rainy River..	Alex. McFayden, Emo.	...	...	...	...	...	...	2	320
Barwick.....	"	"	...	...	...	...	...	...	...	...
Burriss.....	"	"	1	183	1	2	...	...	6	658 $\frac{1}{2}$
Carpenter.....	"	"	...	...	1	1 $\frac{1}{2}$	...	...	3	398
Crozier.....	"	"	...	...	1	37	...	...	5	658
Dance.....	"	"	8	1,270 $\frac{1}{2}$	2	38 $\frac{1}{2}$	9	1,429 $\frac{1}{2}$	6	998 $\frac{1}{2}$
Devlin.....	"	"	...	...	1	40 $\frac{1}{2}$	...	...	...	...
Dobie.....	"	"	1	160 $\frac{1}{2}$	...	...	1	160 $\frac{1}{2}$	...	...
Fleming.....	"	"	1	160 $\frac{1}{2}$	...	...	1	160 $\frac{1}{2}$	...	...
Kingsford.....	"	"	6	960	1	1	8	1,277 $\frac{1}{2}$	3	428
Lash.....	"	"	1	164	...	...	1	164	...	...
Mather.....	"	"	4	665	...	...	3	500	...	...
Miscampbell..	"	"	3	479 $\frac{1}{2}$	2	159 $\frac{1}{2}$	6	984 $\frac{1}{2}$	2	318 $\frac{1}{2}$
Potts.....	"	"	5	815 $\frac{1}{2}$	1	40	7	1,015 $\frac{1}{2}$	6	898
Richardson...	"	"	5	849	1	80	7	1,166	1	161
Roddick.....	"	"	...	...	...	...	...	...	...	...
Woodyatt.....	"	"	...	...	...	...	...	...	...	...
Aubrey.....	Kenora.....	J. E. Gibson, Dryden..	5	558	2	36	5	470 $\frac{1}{2}$	...	...
Britton.....	"	"	...	...	...	...	1	160	...	...
Eton.....	"	"	6	927	1	50	6	886	...	...
Langton.....	"	"	3	396 $\frac{1}{2}$	1	78 $\frac{1}{2}$	3	476 $\frac{1}{2}$	...	...
Melgund.....	"	"	4	571	1	3	8	830 $\frac{1}{2}$	...	...
Mutrie.....	"	"	6	936 $\frac{1}{2}$	4	165	7	1,098	1	6
Redvers.....	"	"	5	589 $\frac{1}{2}$	5	254	3	439 $\frac{1}{2}$	4	394
Rowell.....	"	"	2	222 $\frac{1}{2}$	...	...	2	222 $\frac{1}{2}$	...	...
Rugby.....	"	"	...	...	...	...	...	...	...	...
Sanford.....	"	"	3	456	...	...	3	456	1	159 $\frac{1}{2}$
Southworth..	"	"	1	136	2	149	...	...	3	3
Temple.....	"	"	5	703 $\frac{1}{4}$	2	108	5	681	...	...

Appendix No. 14.—Concluded.

Township.	District or County.	Agent.	No. of persons located.	No of acres located.	No. of purchasers.	No. of acres sold.	No. of persons cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Van Horne...	Kenora	J. E. Gibson, Dryden..	2	179	1	40	1	110	3	240
Wabigoon	"	"	3	497	2	73½	4	644½	2	214
Wainwright ..	"	"	3	474½	1	28	1	160	3	624
Zealand	"	"	13	1,935½	1	28	9	1,352	3	624
Melick	Kenora	W. L. Spry, Kenora...	9	1,135½	2	61	6	933	2	319
Pellatt	"	"	4	381½	1	28	3	356½	1	40
Balfour	Sudbury.....	J. K. MacLennan, Sud-	1	61½	2	394½	1	157	10	154½
Bleazard	"	"	1	138	1	138	1	138	2	319
Broder	"	"	3	353	1	99	1	149	2	99
Capreol	"	"	3	453½	4	221	5	533	8	460
Chapleau	"	"	5	657½	1	45½	1	101½	1	101½
Dill	"	"	3	266½	1	1½	2	320	2	317
Garson	"	"	9	1,374½	1	1½	2	317	1	165
Hanmer	"	"	2	317	1	61½	1	165	2	200
Lumsden	"	"	3	287	1	61½	1	165	2	190
Morgan	"	"	2	263½	1	61½	1	165	2	190
Neelon	"	"	2	263½	1	61½	1	165	2	190
Rayside	"	"	2	263½	1	61½	1	165	2	190
Appelby	Sudbury	John Brown, Markstay	6	902½	3	7	.....	.....	3	400
Casimir	"	"	2	304	1	159	1	15	3	486
Dunnet	"	"	1	159	1	15	1	15	3	486
Hagar	"	"	12	1,915½	1	80½	6	958½	2	240
Jennings .....	"	"	.....	.....	.....	.....	.....	.....	.....	.....
Kirkpatrick ..	Nipissing ...	"	3	416½	.....	.....	.....	.....	3	417
Ratter	Sudbury	"	1	160	.....	.....	.....	.....	2	320
Caldwell	Nipissing	J. A. Philion, Sturgeon	2	321	.....	.....	.....	.....	3	219
Cosby	Sudbury	" Falls	1	160½	.....	.....	.....	.....	2	290
Grant	Nipissing ..	"	7	979½	.....	.....	4	423	4	580½
Macpherson ..	"	"	11	1,623	.....	.....	1	156	4	580½
Martland	Sudbury	"	6	786½	1	1½	1	159½	2	322
Springer	Nipissing	"	5	667	.....	.....	2	320	5	606
Abinger	Lennox and Addington	Charles Both, Denbigh	1	200	.....	.....	.....	.....	2	400
Canonto, S....	Frontenac....	"	.....	.....	.....	.....	.....	.....	.....	.....
" N....	"	"	.....	.....	.....	.....	.....	.....	.....	.....
Clarendon....	"	"	1	151	1	1½	.....	.....	3	406
Denbigh..	Lennox and Addington	"	2	150	.....	.....	2	150	.....	.....
Miller (pt.)...	Frontenac....	"	.....	.....	.....	.....	.....	.....	.....	.....
Palmerston	"	"	.....	.....	.....	.....	.....	.....	.....	.....
McClintock ...	Haliburton....	Unattached	1	100	.....	.....	.....	.....	.....	.....
Airy	Nipissing.....	"	2	399	.....	.....	.....	.....	.....	.....
Finlayson ...	"	"	.....	.....	.....	.....	.....	.....	.....	.....
Murchison ...	"	"	.....	.....	.....	.....	.....	.....	.....	.....
Sabine .....	"	"	.....	.....	.....	.....	.....	.....	1	226
			610	78,192½	147	6,209½	529	69,474½	449	59,300

No. of lots
assigned

No. of acres
assigned

217

27,441

Appendix No. 15.

Statement showing the number of purchasers and of acres sold; of lots resumed for non-performance of the settlement duties; and of patents issued in Townships other than Free Grant during the year ending 31st October, 1917.

Township.	District or County.	Agent.	No. of acres sold.	No. of pur- chasers.	No. of sales cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Armstrong ...	Temiskaming.	J. W. Bolger, New Lis-	159	1			7	1,120
Auld	"	" " " keard	557	4			3	113
Beauchamp...	"	" " "	793 $\frac{1}{2}$	5	1	160	4	637
Brethour	"	" " "	536	4	2	309 $\frac{1}{2}$	4	360
Bryce	"	" " "	479 $\frac{1}{2}$	3			1	40
Bucke	"	" " "	120	1	2	322	1	120
Cane	"	" " "	887	6	6	964	5	199
Casey	"	" " "	743 $\frac{1}{2}$	5			17	1,375
Dymond	"	" " "	313	2			3	634 $\frac{1}{2}$
Firstbrook ...	"	" " "	275	2	2	319	1	2
Harley	"	" " "	475	3			3	400
Harris	"	" " "	480	3			3	243 $\frac{1}{2}$
Henwood	"	" " "	350	3	1	161 $\frac{1}{2}$	3	400
Hilliard	"	" " "	552 $\frac{3}{4}$	4	2	316 $\frac{1}{2}$	3	400
Hudson	"	" " "	281	3			5	545
Kerns	"	" " "	320	2			9	1,441
Lundy	"	" " "	481 $\frac{1}{2}$	3	1	162 $\frac{1}{2}$		
Tudhope	"	" " "	455 $\frac{1}{4}$	3			4	271 $\frac{1}{2}$
Smyth	Temiskaming.	J. A. Browning, Elk Lake	249	2	1	90 $\frac{1}{2}$		
Lorrain	Temiskaming.	Neil J. McAulay, Hailey- bury	21	1			5	760
Beatty	Temiskaming.	F. E. Ginn, Matheson ..	871 $\frac{1}{2}$	6	2	234 $\frac{1}{2}$	7	396
Benoit	"	" " "	2,637 $\frac{3}{4}$	17	3	478 $\frac{1}{2}$	1	142 $\frac{1}{2}$
Bond	"	" " "	475	3				
Bowman	"	" " "	639 $\frac{1}{2}$	4			4	639 $\frac{1}{2}$
Calvert	"	" " "	158	1	5	792		
Carr	"	" " "	1,319	10			4	366 $\frac{1}{2}$
Clergue	"	" " "	321	2	4	641	1	159
Currie	"	" " "	155 $\frac{1}{2}$	1	1	144	1	156 $\frac{1}{2}$
Dundonald ...	"	" " "	1,433 $\frac{1}{2}$	10	4	543	1	5
Evelyn	"	" " "	5,270	33				
German	"	" " "	2,184	14				
Hislop	"	" " "	2,366	15	2	308 $\frac{1}{2}$	4	641
Matheson	"	" " "	3,150	20	1	477	2	200
Mountjoy	"	" " "	4,636 $\frac{1}{4}$	30	5	791 $\frac{1}{2}$	1	148 $\frac{1}{2}$
McCart	"	" " "	1,725 $\frac{1}{2}$	11	1	160		
Playfair	"	" " "	2,278 $\frac{1}{2}$	14			2	321
Stock	"	" " "	2,858	18	3	476 $\frac{1}{2}$		
Taylor	"	" " "	633 $\frac{1}{2}$	4	1	162 $\frac{1}{2}$	2	310 $\frac{1}{2}$
Walker	"	" " "	455 $\frac{1}{2}$	3	3	455	3	477
Blount	Temiskaming.	S. J. Dempsay, Cochrane	1,125	9			1	1
Brower	"	" " "	320	2			2	322
Calder	"	" " "	1,661	11	84	12,564	1	119
Clute	"	" " "	2,800	18	10	1,427	2	295
Colquhoun ...	"	" " "	151	1				
Fauquier	"	" " "	7,516	51				
Fournier	"	" " "	610 $\frac{1}{2}$	4	58	8,801 $\frac{1}{2}$		
Fox	"	" " "	2,872	18	4	631		
Glackmeyer ...	"	" " "	940	6	3	489	7	1,038
Kennedy	"	" " "	1,507	10				
Lamarche	"	" " "	619	4			1	163 $\frac{1}{2}$
Leitch	"	" " "	301	2				
Newmarket...	"	" " "	481 $\frac{1}{2}$	3	2	322		
Pyne	"	" " "	477 $\frac{1}{2}$	3				
Shackleton ...	"	" " "	9,502	66	31	4,711		

Appendix No. 15.—Continued.

Township.	District or County.	Agent.	No. of acres sold.	No. of pur- chasers.	No. of sales cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Catharine.....	Temiskaming.	Jos. Woollings, Englehart	322	2	1	163	2	153
Chamberlain ..	"	"	554 $\frac{1}{2}$	4	.....	.....	4	623
Dack	"	"	647 $\frac{1}{2}$	4	.....	.....	4	584 $\frac{1}{2}$
Eby .....	"	"	.....	.....	.....	.....	9	360
Ingram	"	"	720 $\frac{1}{2}$	5	4	640	2	161 $\frac{1}{2}$
Marter	"	"	160	1	.....	.....	6	938
Marquis	"	"	320	2	1	160	.....	.....
Otto	"	"	145 $\frac{1}{2}$	1	.....	.....	8	298 $\frac{1}{2}$
Pacaud	"	"	1,880	12	4	632 $\frac{1}{2}$	5	434 $\frac{1}{4}$
Pense	"	"	482	3	1	160	.....	.....
Robillard	"	"	402	3	.....	.....	2	320
Savard	"	"	632 $\frac{1}{2}$	4	3	479	6	953 $\frac{1}{2}$
Sharpe	"	"	403 $\frac{1}{2}$	3	.....	.....	4	434
Truax	"	"	79 $\frac{1}{2}$	1	1	159 $\frac{1}{2}$	.....	.....
Evanturel .....	"	"	.....	.....	.....	.....	7	941 $\frac{1}{2}$
Casgrain	Algoma	T. V. Anderson, Hearst.	1,544	10	2	299	.....	.....
Eilber	"	"	491	3	.....	.....	.....	.....
Hanlan	"	"	1,812	12	2	302	.....	.....
Kendall	"	"	600	4	1	150	2	200
Lowther	"	"	743	5	.....	.....	.....	.....
Forbes	Thunder Bay.	W. A. Burrows, Port	3,161 $\frac{1}{2}$	24	.....	.....	.....	.....
Lyon	"	Arthur	504 $\frac{1}{2}$	3	.....	.....	1	148
Nepigon	"	"	4,204 $\frac{1}{2}$	27	1	166	107	16,414
Aweres	Algoma	E. Noble, Sault Ste. Marie	678	5	3	474	2	5 $\frac{1}{2}$
Tarentorus ..	"	"	838	6	1	160	.....	.....
Vankoughnet ..	"	"	.....	.....	.....	.....	1	184
Watten	Rainy River..	C. J. Hollands, Fort Frances	150	1	.....	.....	.....	.....
Day	Algoma	Thos. Dodds, Thessalon.	8	1	1	132	.....	.....
Gladstone	"	"	143	1	.....	.....	.....	.....
Haughton .....	"	"	.....	.....	.....	.....	1	155 $\frac{1}{2}$
Kirkwood	"	"	141	1	.....	.....	.....	.....
Parkinson .....	"	"	.....	.....	.....	.....	3	394
Patton .....	"	"	.....	.....	.....	.....	1	160
Rose .....	"	"	.....	.....	.....	.....	4	627
Thompson	"	"	159	1	.....	.....	2	310 $\frac{3}{4}$
Hallam	Algoma	R. W. Teasdale, Massey	.....	.....	.....	.....	2	200
Harrow .....	"	"	.....	.....	.....	.....	1	160
May	"	"	378	2	.....	.....	2	378
Salter	"	"	310	3	.....	.....	.....	.....
Victoria	"	"	296	2	.....	.....	.....	.....
Dowling	Sudbury	J. K. MacLennan, Sud- bury	201	2	.....	.....	2	244 $\frac{3}{4}$
Seollard	Nipissing	J. A. Philion, Sturgeon	473 $\frac{1}{2}$	3	.....	.....	.....	.....
Mason	"	" Falls	110	1	.....	.....	1	7 $\frac{1}{2}$
Hugel	Nipissing	John Brown, Markstay.	160 $\frac{1}{2}$	1	.....	.....	.....	.....
Loudon	"	"	160	1	1	130 $\frac{1}{2}$	.....	.....
Widdifield	Nipissing	W. J. Parsons, North Bay	829	5	4	640 $\frac{1}{2}$	.....	.....
Admaston	Renfrew	Unattached .....	.....	.....	.....	.....	6	700
Bagot	"	"	335	4	.....	.....	5	495
Bromley .....	"	"	.....	.....	.....	.....	1	380
Alfred	Prescott	Unattached	343	1	.....	.....	1	343

Appendix No. 15.—Continued.

Township.	District or County.	Agent.	No. of acres sold.	No. of pur- chasers.	No. of sales cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Adolphustown .	Lennox	Unattached	9	1 . . . . .	.....	.....	1	9
Sheffield . . . . .	"	"	.....	1 . . . . .	.....	.....	2	300
Ariemesia	Grey	Unattached . . . . .	.....	.....	.....	.....	3	265
Bentinck . . . . .	"	"	.....	.....	.....	.....	2	151
Glenelg . . . . .	"	"	.....	.....	.....	.....	2	149
Proton . . . . .	"	"	.....	.....	.....	.....	4	306
Sullivan . . . . .	"	"	.....	.....	.....	.....	1	50
Arran	Bruce	Unattached . . . . .	.....	.....	.....	.....	1	98½
Brant . . . . .	"	"	.....	.....	.....	.....	1	50
Bruce . . . . .	"	"	.....	.....	.....	.....	5	450
Greenock . . . . .	"	"	.....	.....	.....	.....	1	96
Huron . . . . .	"	"	.....	.....	.....	.....	1	50½
Kincardine . . . . .	"	"	.....	.....	.....	.....	1	100
Saugeen . . . . .	"	"	.....	.....	.....	.....	1	129
Barrie	Frontenac	Unattached . . . . .	.....	.....	.....	.....	2	200
Bedford . . . . .	"	"	.....	.....	.....	.....	1	1½
Kennebec	"	"	216½	1 . . . . .	.....	.....	4	226½
Bathurst	Lanark	Unattached . . . . .	.....	.....	.....	.....	1	165
Beckwith	"	"	3	1 . . . . .	.....	.....	1	3
Elmsley . . . . .	"	"	.....	1 . . . . .	.....	.....	1	49
Lanark . . . . .	"	"	.....	.....	.....	.....	1	100
Plantagenet . . . . .	"	"	.....	.....	.....	.....	1	50
S. Sherbrooke . . . . .	"	"	.....	.....	.....	.....	1	50
N. Sherbrooke . . . . .	"	"	.....	.....	.....	.....	1	100
Sandwich, E.	Essex	Unattached	84	1 . . . . .	.....	.....	.....	.....
Sandwich, W.	"	"	50¾	4 . . . . .	.....	.....	2	1
Windsor (City)	Essex	Unattached . . . . .	.....	.....	.....	.....	3	16
Seymour	N'thumberl'd.	Unattached . . . . .	.....	.....	.....	.....	1	21
Dennison	Sudbury	Unattached	193	2 . . . . .	.....	.....	.....	.....
Drury . . . . .	"	"	.....	.....	.....	.....	2	91
Dryden	"	"	772	5 . . . . .	.....	.....	.....	.....
Falconbridge	"	"	470	3 . . . . .	.....	.....	22	981
Graham	"	"	262	2 . . . . .	.....	.....	2	100
Levack	"	"	200	1 . . . . .	.....	.....	3	241
Lorne	"	"	531	4 . . . . .	.....	.....	1	138
Louise	"	"	597	6 . . . . .	.....	.....	6	638½
MacLennan . . . . .	"	"	.....	.....	.....	.....	5	183
Snider . . . . .	"	"	.....	.....	.....	.....	2	100
Waters	"	"	170½	2 . . . . .	.....	.....	1	160
Badgerow	Nipissing	Unattached	478	3 . . . . .	.....	.....	4	643
Bastedo	"	"	320	2 . . . . .	.....	.....	2	320
Field . . . . .	"	"	.....	.....	.....	.....	1	5
Gibbons	"	"	480	2 . . . . .	.....	.....	1	320
Malachi	Kenora	Unattached	60	15 . . . . .	.....	.....	21	35½
Redditt	"	"	27	4 . . . . .	.....	.....	4	27
Carden	Victoria	Unattached	100	1 . . . . .	.....	.....	1	100
Dalton . . . . .	"	"	.....	.....	.....	.....	2	154
Laxton	"	"	152	2 . . . . .	.....	.....	4	352
Somerville	"	"	98	1 . . . . .	.....	.....	.....	.....
Edwardsburgh	Grenville	Unattached . . . . .	.....	.....	.....	.....	1	50

Appendix No. 15.—Concluded.

Township.	District or County.	Agent.	No. of acres sold.	No. of pur- chasers.	No. of sales cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Harvey	Peterborough.	Unattached	202	1	.....		1	210
Haughton....	Norfolk	Unattached					1	50
Hungerford ...	Hastings.....	Unattached					1	50
Tudor	"	"					2	199
Humberstone .	Welland	Unattached					1	89 $\frac{3}{4}$
Matchedash...	Simcoe	Unattached	88	3	.....		2	155
Oro	"	"					1	50
Peel.....	Wellington...	Unattached					2	150
Rama	Ontario	Unattached					1	100
Cobden	Algoma	Unattached	92	1	.....		3	373 $\frac{1}{2}$
Gould	"	"	146	1	.....			.....
Townsite—								
Hearst	"	T. V. Anderson	4 $\frac{5}{8}$	10	.....			.....
Hilton	"	W. E. Whybourn	8 $\frac{1}{2}$	2	.....		1	8
Townsite—								
Armstrong..	Temiskaming.	Unattached	4	2	.....			.....
Grant	Kenora	"	3 $\frac{1}{9}$	16	.....		2	$\frac{1}{2}$
MacFarlane.	"	"	3	2	.....		3	2 $\frac{3}{4}$
Sioux Look- out.....	"	"					6	3
Winnipeg River Crossing..	"	"	1	1	.....		5	2 $\frac{3}{4}$

WATER LOTS.

Township of Humberstone	Welland	Unattached	90	1	.....			.....
Saltfleet	Wentworth ..	"					1	5 $\frac{1}{4}$
City of Windsor	Essex	"					1	1 $\frac{1}{4}$

ISLANDS.

Mason—								
Part Island C	Nipissing ...	J. A. Philion	7 $\frac{1}{2}$	1	.....			.....
S. Elmsley—								
Part Island 2	Lanark	Unattached	$\frac{93}{100}$	1	.....			.....
" 3	"	"	4 $\frac{52}{100}$	1	.....			.....
" 4	"	"	1 $\frac{33}{100}$	1	.....			.....
" 5	"	"	1 $\frac{26}{100}$	1	.....			.....
Pt. Island in Otter Lake	"	"	4 $\frac{13}{100}$	1	.....			.....
N. Elmsley—								
Pt. Island in Sand Lake	"	"	7 $\frac{6}{100}$	1	.....			.....
Bedford—								
Island 34 ...	Frontenac ...	"	$\frac{4}{5}$	1	.....			.....
Escott (rear of)								
Flat Island .	Leeds	"	2 $\frac{4}{5}$	1	.....			.....
Malachi—								
6 Islands ...	Kenora	"	14 $\frac{1}{2}$	6	.....		6	14 $\frac{1}{2}$
Total			104,385 $\frac{43}{100}$	776	276,42,263		501	51,745 $\frac{1}{4}$

W. R. LEDGER, Sales Clerk.
W. C. CAIN, Chief Clerk in Charge.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 16.

Statement of Crown Surveys completed and closed during the twelve months ending October 31st, 1917.

No.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amount Paid.	Area in Acres.
				\$ c.	
1	Apr. 15, 1915	J. S. Dobie	Survey of islands north and west of Manitoulin Island, Districts of Algoma and Manitoulin	5,388 24	
2	Apr. 20, 1915	Lang & Ross ...	Survey of Islands on the North Shore of Lake Huron and Georgian Bay, Districts of Manitoulin, Sudbury and Parry Sound	4,500 08	
3	Apr. 16, 1915	T. J. Patten ...	Survey of islands in Lake Huron, east and north-east of Manitoulin Island, District of Manitoulin..	6,036 98	
4	May 26, 1916	Phillips & Benner	Survey of Nipigon Forest Reserve in District of Thunder Bay	3,300 00	
5	June 13, 1916	David Beatty ..	Survey of the Township of Foleyet, in the District of Sudbury	1,637 34	51,470
6	June 30, 1916	R. S. Code	Survey of the Township of Muskogee, in the District of Sudbury	819 82	51,589
7	Sept. 5, 1916	J. W. Fitzgerald	Survey of Township outlines in the District of Algoma	1,308 55	
8	Sept. 21, 1916	McAuslan & Anderson	Survey of Town Plot of Bear Island in the District of Nipissing	533 41	
9	July 31, 1916	R. S. Code	Survey of part of the Township of Keith, in the District of Sudbury	3,098 70	25,989
10	Oct. 18, 1916	McAuslan & Anderson	Survey of the line between Townships of Gooderham and Kenny, District of Nipissing	360 21	
11	Oct. 23, 1916	Sutcliffe & Neelands	Survey of lines in the Townships of Ogden, Bristol and Thornloe, District of Timiskaming	657 92	
12	Nov. 25, 1916	McAuslan & Anderson	Survey of certain lots in the Township of Notman, in the District of Nipissing	158 76	
13	Feb. 19, 1916	McAuslan & Anderson	Survey of Mesomikenda and Minisnakawa Lakes, in the District of Sudbury	610 31	
14	May 31, 1917	J. R. Gill	Survey of line in the Township of Sweeny, in the District of Sudbury	389 44	
15	Jan. 27, 1917	Alex. Baird	Assisting Jas. Hutcheon, Inspector of Surveys in outlining water lots of Fishing Point, Pelee Island	65 00	
				28,864 76	129,048

L. V. RORKE,
Director of Surveys.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 17.

Statement of Surveys in progress during the twelve months ending October 31st, 1917.

No.	Date of Instructions.	Name of Surveyor.	Description of Surveys.	Amount Paid.
				\$ c.
1	Apr. 20, 1915	Lang & Ross ...	Survey of islands on the North Shore of Lake Huron and Georgian Bay, Districts of Manitoulin, Sudbury and Parry Sound.	4,000 00
2	July 13, 1917	D. J. Gillon	Survey of the Namakan River, District of Rainy River	1,000 00
3	July 24, 1917	J. L. Morris	Survey of the Township of Kapuskasing, District of Algoma	3,850 00
4	Aug. 30, 1917	David Beatty ..	Re-survey of the Township of O'Brien, District of Algoma	3,000 00
5	Sept. 7, 1917	A. L. Russell ...	Survey of the shores of Lower Shebandowan Lake, District of Thunder Bay	500 00
6	Oct. 19, 1917	H. M. Anderson..	Re-survey of the Township of Owens, District of Timiskaming	1,000 00
7	Oct. 24, 1917	J. S. Dobie	Survey of the Township of Idington, District of Algoma	1,000 00
				14,350 00

L. V. RORKE,
Director of Surveys.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 18.

Statement of Municipal Surveys for which instructions issued during the twelve months ending October 31st, 1917.

No.	Name of Surveyor.	No.	Date of Instructions.	Description of Survey.
1	G. A. McCubbin	708	Oct. 31st, 1916.	To survey the road allowance between lots 24 and 25, across concession 1, west of the Communication Road, Township of Harwich, in the County of Kent, and to plant stone or other durable monuments to mark the said road allowance.
2	C. A. Jones .	709	Nov. 2nd, 1916.	To survey the boundary line between the Townships of Greenock and Culross, in the County of Bruce, and to plant stone or other durable monuments to mark the said boundary.
3	Jas. J. McKay	710	Dec. 5th, 1916.	To survey the limits of that portion of the original allowance for road between the 2nd and 3rd concessions of the Township of Barton, in the County of Wentworth (now called Main Street) lying in the City of Hamilton, between the original allowance for road between lots Nos. 18 and 19 of the said Township (Dundurn St.), on the east, and the division line between the Townships of Barton and Ancaster on the west, to be defined and marked by durable monuments placed at the intersections of the said road allowance (Main Street) with Dundurn Street, the division line between lots Nos. 19 and 20, the Hamilton and Dundas Stone Road, Macklin Street and Paradise Road.
4	Oliver Smith.	711	May 30th, 1917	To survey the concession road allowance between concessions 4 and 5 in the Township of Verulam across lot No. 5, and that stone or other durable monuments be placed at the front angles of lot No. 5 in the 5th concession.
5	Oliver Smith.	712	July 24th, 1917	To survey the concession line between concessions 9 and 19, opposite lot 17, Township of Cartwright.
6	R. W. De-Morest	713	Sept. 4th, 1917.	To survey the concession line between concessions 1 and 2 across lots 1 to 4 inclusive, in the Township of Balfour, and that stone or other durable monuments be placed at the front angles of the lots fronting on said part of concession.
7	W. S. Gibson.	714	Sept. 20th, 1917	To survey the original road allowance between lots 20 and 21 in the 2nd concession, of the Township of York, west of Yonge Street, and to mark the same by monuments of stone or other durable material.
8	E. D. Bolton..	715	Sept. 21st, 1917	To survey the road allowance between lots 10 and 11, across concessions 9 and 10, in the Township of Egremont, in the County of Grey, and to plant stone or other durable monuments to mark the boundaries of said road allowance.

L. V. RORKE,
Director of Surveys.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 19.

Statement of Municipal Surveys confirmed during the twelve months ending
October 31st, 1917.

No.	Name of Surveyor	No.	Date of Instructions.	Description of Surveys.	Date when confirmed under R.S.O. 1914, Chap. 166, Secs. 10-15 inclusive.
1	W. G. McGeorge	697	Mar. 24th, 1915	To survey the concession line between concessions 2 and 3, in the Township of Harwich, from lot No. 3 to the waters of the Rond Eau and to plant stone or iron monuments on each side thereof.	Apr. 4th, 1917.
2	George A. McCubbin	700	June 22nd, 1915	To survey the line in the Township of Zone from between the 3rd and 4th concessions across concessions 4, 5 and 6 to the Longwoods Road and to mark the said line by permanent monuments.	Dec. 15th, 1916
3	J. J. MacKay ..	704	Oct. 22nd, 1915	To survey the road allowance between the broken front and the first concession of the Township of North Grimsby, from the easterly limit of the said Township of North Grimsby to the allowance for road between lots Nos. 6 and 7 in the first and broken front concessions, and that durable monuments be planted defining the limits of the 66-foot reservation for a highway between the said broken front and the first concession of the Township of North Grimsby from the easterly limit of the said Township to the allowance for road between lots Nos. 6 and 7, in the first and broken front concessions.	Jan. 24th, 1917
4	George A. McCubbin	708	Oct. 31st, 1916	To survey the road allowance between lots 24 and 25, across concession 1, west of the Communication Road, Township of Harwich, in the County of Kent, and to plant stone or other durable monuments to mark the said road allowance.	Jan. 18th, 1917
5	Speight & Van Nost-rand.....	7477	Apr. 21st, 1915	To survey the easterly part of the Toronto and Hamilton Highway.	July 12th, 1917

L. V. RORKE,
Director of Surveys.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

*Appendix No. 20.*SURVEY OF THE EAST LIMIT AND THE EAST 22 MILES OF THE SOUTH LIMIT OF
NEPIGON FOREST RESERVE, DISTRICT OF THUNDER BAY.

PORT ARTHUR, December 21st, 1916.

SIR,—We beg to report that according to instructions dated May 26th, 1916, we have surveyed the east boundary and that part of the south boundary east of the township of Ledger, of the Nepigon Forest Reserve.

From the south-east angle of the township of Ledger, where the iron tube planted by O.L.S. T. B. Speight was found, the south boundary was run east astronomically, with reference to a meridian through its central point, a distance of twenty-two miles; from this point a meridian was run north ninety-eight miles to the north-east angle of the Reserve. Frequent observations were taken to ensure the correct bearing of the lines.

Wooden posts were planted at every mile on the lines and iron posts $1\frac{1}{4}$ in. in diameter at intervals of six miles, starting from west to east on the south boundary and from south to north on the east boundary. Posts were numbered from one to twenty-one on the south boundary and from one to ninety-seven on the east boundary. At the end of the 22nd mile on the south boundary and the 98th mile on the east boundary iron posts $1\frac{7}{8}$ in. in diameter, marked Nepigon Forest Reserve, were planted.

The ends of the 2nd, 4th, 38th, 40th, 46th and 79th miles on the east boundary coming in bodies of water, the posts were planted on the nearest shore and marked accordingly.

MINING CLAIMS.

No mining claim surveys were crossed. Where, from the tracing furnished us, it appeared that we should be in the neighborhood of M C 50 and 57, and M C 56 and 58, we were careful to search for these, but no evidence was found of any survey. Stakes were found with no marks on them as shown on pages 61 and 62 of field notes.

SOIL.

With the exception of the first mile and a half on the south boundary which is clay, the soil passed over was sand and muskeg; on the remainder of the south boundary there is no soil worth mentioning, it being almost entirely rock and small muskegs. Going north on the east boundary after the first five or six miles the rock gradually becomes less prominent and the country in general varies from rolling to flat with an occasional rocky hill. The level country is usually in the form of muskeg or swamp, the only pronounced exception to this being immediately south of the Canadian Northern Railway where there is an area of level land about three-quarters of a mile across. From about six miles north of the Canadian Northern Railway to the end of the line the country is roughly about one-half muskeg or swamp, the remainder being low ridges of rock or both.

ROCK FORMATION.

The rock of the south boundary is all granite with an occasional small belt of diabase running through it, this formation appears to continue on the east boundary to the south side of the lake on the 36th mile; from the north side of this lake the Keewatin formation predominates up to the 57th mile where the granite comes in again for about four miles, then the formation is Keewatin with small belts of diabase up to the 65th mile where granite occurs again and continues up to about the end of the 68th mile. From here to the end of the line the rock is principally Keewatin with belts of diabase. From the 83rd mile northward there is considerable local attraction (the maximum noted was 39 degrees west on the 84th mile) indicating the presence of iron-bearing rocks.

TIMBER.

The principal timber throughout almost the entire line is spruce. On the south boundary for the first six miles the growth is thick and small and there is no timber of any value. This occurs again on the 9th and 11th miles; also on the east boundary, on the 89th to the 93rd miles the timber is small and thick and consists principally of birch, poplar and jack pine. With these exceptions, however, the country is well wooded with spruce, balsam, birch and some jack pine from 3 to 18 in. on the south boundary and for about six miles north on the east boundary where the poplar is present more frequently and the timber is somewhat larger from this point north, the largest timber being about 24 inches in diameter, but averaging from 5 to 8 inches. On the northerly half of the east boundary the muskegs and swamps occur more frequently, but the timber on the high ground remains the same with a few exceptions. In the swamps some cedar is met with but it is usually of a short, scrubby growth, the principal timber in the swamps being spruce, usually small, and dead tamarac. Some jack pine of sufficient size to be of value occurs on the 34th and 35th miles, the 39th, 40th and 41st miles, the 51st and 52nd miles, and some slightly smaller in size on the 96th mile.

The recently burned areas are small and occur on the 35th and 36th miles, the 56th mile, the 77th to the 79th mile, while a fire of comparatively recent date has been over the country from the north side of Lily lake to the 94th mile.

GAME, ETC.

Moose, deer and caribou are plentiful along the south boundary and the southerly part of the east boundary, but farther north, while present, they do not appear to be as numerous.

On the south boundary and north on the east boundary as far as about the 30th mile, beavers are very numerous, but from this point up to the 49th mile none of their work was seen: from this point they are absent again up to that part of the east boundary north of the 81st mile where they appear again.

The only kinds of fish seen or caught were pike, pickerel and whitefish. The waters of the lakes up to the lake at the 37th mile, while having no disagreeable taste, are dark in colour, but this lake and most of those north of it are clear, but notwithstanding this no trout were seen or caught.

During the survey frequent reference was made to the maps issued by the Dominion Geological Department, and the Department of the Interior. These were found to be very reliable except in the case of the topographical sheet for district south and east of the south boundary, but for this portion of the country all maps were found to be incorrect.

We have the honour to be, Sir,

Your obedient servants,

(Signed) PHILLIPS & BENNER,

Ontario Land Surveyors.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 21.

SURVEY OF THE TOWNSHIP OF FOLEYET, IN THE DISTRICT OF SUDBURY.

PARRY SOUND, December 29th, 1916.

SIR,—I have the honour to report that under your instructions dated the 13th day of June, 1916, I have subdivided the township of Foleyet into farm lots. I commenced the survey at the south-east angle of the township by chaining the south boundary westward and planting posts making the lots 25.25 wide, exclusive of side-road allowance. At the side-road between lots 6 and 7 I observed Polaris at Eastern Elongation (Azimuth 1 degree 43 minutes) and ran line due north in centre of road allowance (1 chain wide), and after chaining the east boundary of the township one mile and a half north from said south-east corner, I turned angle from a long range of pickets and ran due west to intersection of said side-road line and checked angle which I found to be correct and continued the survey throughout the township observing Polaris frequently for meridian and correcting any small errors in direction of lines. I made survey of all lakes that my lines intersected as well as those that I found when travelling across country.

I made a careful traverse of Pishkanogama river, which is the outlet of Pishkanogama lake and which enters the township from the south on lot 19, and runs northerly and easterly through the township to lot 5, in concession 11, where it turns westerly to lot 9, thence northerly crossing the north boundary on lot 10. On lots 8, 9, 10 and 11 the river expands to the north and south, the largest expansion in concessions 8, 9 and 10 being known as Sand lake. There are no falls on the river but it breaks into rapids in concession 2 which continue to lot 13 in concession 3, and again into rapids in concession 8, which continue down to the bend westward on lot 6, concession 11.

There is a fall of about seventy feet between Pishkanogama lake and the river at the foot of the rapids on lot 13, concession 3, but I do not think that there is any feasible place on the river for creating a water power, and the same conditions

apply to the rapids further north where there is a difference in level of about fifty feet between the head and foot of rapids; there is no part of either rapids that cannot be run with a canoe.

The south four concessions of the township, east of side-road 24 and 25 is sandy and rolling and in places with hills from 20 to 50 ft. high. Commencing on lots 24 and 25 the country is broken with rocky ridges in some places more than 100 ft. high and wholly unfit for agricultural purposes. This rocky country extends northward through the township. North of the line between concessions 4 and 5 there is a gradual change of soil from sand to clay, and there is some fairly good agricultural land extending from the east boundary westward to the rocky belt in the western part of the township. I do not think that there is more than forty per cent. of the township fit for agricultural purposes.

The Canadian Northern Railway enters the township from the east in concession 3 and crosses the north boundary in concession 12 on lot 13.

The timber in the township is principally spruce and jack pine, a considerable part of the latter being large enough for railway ties and some suitable for lumber. There is a small area of red and white pine in concessions 1 and 2, extending from lot 10 to lot 15, and again there is considerable pine in concessions 6, 7, 8, 9 and 10, between side-road 6 and 7 and side-road 12 and 13. The rock formation is granite.

There are white fish, lake trout, speckled trout, pickerel and pike in Pishkanogama lake, and I expect the same in the expansions of the river farther north although white fish and pickerel were the only kinds that we caught when camped there. The only game I saw was moose.

The village of Foleyet is on lots 5 and 6, in concession 6, and has a population composed chiefly of railway employees. It is a divisional point on the Canadian Northern Railway. There are about twenty houses besides the round house and machine shop.

I have the honour to be, Sir,

Your obedient servant,

(Signed) DAVID BEATTY,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 22.

SURVEY OF THE TOWNSHIP OF MUSKEGO, IN THE DISTRICT OF SUDBURY.

TORONTO, ONT., May 24th, 1917.

SIR,—I have the honour to submit the following report of the survey of the township of Muskego, in the district of Sudbury, under instructions received from your Department dated June 30th, 1916.

Commencing at the 18th mile post planted by O.L.S. T. B. Speight at the south-east angle of the township of Muskego, I proceeded with the survey by cutting out and re-chaining the line between the township of Muskego and Keith. This line being run in the year 1909 was greatly obstructed by fallen timber, with a considerable growth of underbrush. Having chained my base along this line and determined the astronomical bearing of same, I proceeded with the survey in accordance with instructions, running north astronomically along the line between lots 6 and 7 for several miles, thence north astronomically along the line between lots 12 and 13, laying off the concession lines running east and west from the measurements set forth in the instructions finishing the south-east section of the township first, thence the north-east section, thence the north-west section, thence the south-west section.

Owing to the continued unfavourable weather which set in about the middle of October I was obliged to withdraw from the work without completing the traverse of the lakes and rivers, as it was impossible to travel the waters by canoe or on ice. Returning in the month of February I proceeded with the traverse work, and finally, after the third attempt, completed the same in the month of April.

The survey throughout was made with the transit. Particular attention was given to the proper cutting of the line, also to the blazing, posting and chaining of same. Durable posts were made, carved in the regular way with a scribe, and securely planted. Iron posts were planted according to instructions, with one exception, the iron post instructed to be planted on the west boundary of Muskego, at the intersection of concession line 6 and 7, was inadvertently placed at the south-west angle of lot 24, concession 7.

PHYSICAL FEATURES.

The general nature of the township is rolling. Very few large hills exist. The swamps are very numerous, being chiefly spruce and cedar swamps with dry tamarac. These swamps are underlaid with boulders, which in various places protrude to the surface.

DRAINAGE.

The township is drained by the Scorch river, formerly called the Sturgeon river, and by the Muskego river—the Scorch river and lake draining the greater part of the township. Slate Rock lake, Singed-tree lake, and Winter Spawning lake, all drain to the Scorch river. This river, when improvements are made at the narrows in lot 16, concession 4, by removing of boulders and widening the channel, will be of great benefit in lumbering operations for the conveyance of lumber to the railway.

TIMBER.

The township is heavily timbered with spruce, balsam, birch, poplar and jack pine, with scattering white pine. Cedar is found along the banks of the rivers and lakes and in the swamps. The timber is most suitable for pulpwood and railway ties.

The windfall of timber is general throughout the township, which, in my opinion, is caused from the light overburden of soil.

SOIL.

The soil is principally of a sandy nature with little clay or loam; boulders of rock are predominant throughout the soil, and for which reason I would consider about fifty per cent. of the township suitable for agricultural purposes.

MINERALS.

The rock formation chiefly consists of keewatin and granite, the keewatin rock being composed of greenstone and schist. In this is found quartz veins, but no mineral of economic value was found.

GAME AND FISH.

Game is most plentiful, consisting of moose, bear, wolves, fox, mink, beaver and martin.

Fish is also plentiful, chiefly pike and pickerel.

The magnetic variation is constant, being six degrees and thirty minutes west of astronomical north.

I submit with this report, general plan, timber plan, field notes and traverse plans.

All of which is respectfully submitted.

I have the honour to be, Sir,

Your obedient servant,

(Signed) R. S. CODE,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 23.

SURVEY OF OUTLINES OF TOWNSHIPS, DISTRICT OF ALGOMA.

PETERBOROUGH, ONT., March 15th, 1917.

SIR,—I have the honour to submit the following report on the survey of certain township outlines in the district of Algoma, made by me under instructions from

your Department, dated September 5th, 1916. I also beg to submit herewith the plans, field notes and account in connection with this survey, all of which I trust will be found complete and satisfactory.

I commenced the survey at the north-west angle of the township of Woolrich, from which point I ran west astronomically four miles along the south boundaries of the townships of Farquhar and Haig. I then proceeded to the south-west angle of the township of Dowsley, from which point I ran the north boundary of the township of Haig west astronomically nine miles. I then returned to the south-west angle of the township of Dowsley and ran the east boundary of the township of Haig south astronomically nine miles six chains and twenty links intersecting my base line at a point three miles thirteen chains and thirteen links west of the north-west angle of the township of Woolrich. I then ran the south boundary of the township of Haig west astronomically nine miles, and from this point I ran the line between the townships of Haig and Wicksteed north astronomically nine miles four chains and two links, intersecting my base line at a point eight miles seventy-seven chains and twelve links west of the south-west angle of the township of Dowsley. I then ran the north boundary of the township of Wicksteed west astronomically nine miles. I then returned to the south-west angle of the township of Haig and ran the south boundary of the township of Wicksteed west astronomically nine miles, and from this latter point I ran the west boundary of the township of Wicksteed north astronomically nine miles five chains and eight links, intersecting my base line at a point eight miles seventy-seven chains and twenty-nine links west of the north-west angle of the township of Haig.

Substantial posts of the dimensions called for and made of the most durable wood in the locality and properly marked were planted at every mile on the base lines and at every one and one-half miles on the meridian lines, the position of each of these posts being verified by two bearing trees.

Iron posts, properly marked, were also planted at the several corners of the townships and at the end of every third mile along the lines.

Observations on Polaris at or near elongation were taken at every opportunity that presented itself, the work closing almost theoretically correct.

Along that part of the south boundary of the township of Farquhar surveyed by me, and along the whole of the south boundary of the township of Haig, and for the first two miles of the south boundary of the township of Wicksteed, the country is of a gently undulating character, covered chiefly with spruce and banksian pine up to ten inches in diameter; the soil, consisting, generally speaking, of a black loam ten to fourteen inches in depth with clay subsoil; this line crosses a number of lakes and rivers; it also crosses the Canadian Northern Railway twice and passes along five links north of the station section house at Shekak.

From the second to the ninth mile along the south boundary of the township of Wicksteed the country is of a rolling character heavily timbered with spruce up to eighteen inches in diameter, banksian pine up to sixteen inches, white birch and poplar to twelve inches. Along this line there are a few outcroppings of rock and the soil is light and sandy. The line between the townships of Haig and Farquhar runs through an undulating country timbered with spruce, banksian pine, white birch and poplar up to eight inches in diameter on the uplands, with spruce and dead tamarac swamps on the lowlands.

Along this line the soil is good black loam from ten to fourteen inches in depth and free from stone.

The country along the line between the townships of Haig and Wicksteed for the first two miles is low and swampy, and from this point up to the seven and one-half mile post the country is rolling and heavily timbered with spruce up to eighteen inches, banksian pine to sixteen inches, poplar and white birch up to twelve inches with spruce and dead tamarac swamps in the valleys. The soil is a sandy clay loam with a few outcroppings of rock.

From the seven and one-half mile post to the end the line runs through an old brûlé interspersed with swamps.

The north boundary of the township of Haig and the north and west boundaries of the township of Wicksteed run, for the most part, through a very old brûlé country covered with poplar, white birch, and banksian pine, interspersed with spruce and dead tamarac swamps; the soil in some places being fairly good and in other places light and sandy. There are also a few outcroppings of rock along these lines.

From the age of the timber now on the ground and other evidences there is no doubt this country was overrun by a very destructive fire about the year 1850, and at many places this fire not only destroyed the timber, but also wiped away the humus of the soil.

There are numerous lakes and quite a few large streams and rivers traverse these townships, but no water power of any note. The water of all these lakes and rivers is clear and wholesome.

The rock in this locality is of the Huronian formation, and bears no evidence of being mineralized. The Canadian Northern Railway runs through these townships. It has a first-class road-bed, is well ironed and with long tangents, and very easy grades and curves give every evidence of being carefully located and permanently constructed.

Hornepayne, a divisional point, is located in the township of Wicksteed and already forms the nucleus of a thriving settlement; here there are all told about fifty buildings and many more under construction.

I also understand that the number of children of school age is twenty-three, and that the proper steps have already been initiated to open a school.

During the greater part of the work the snow was very deep and there being no frost in the ground the travelling was very bad, and I did not explore the interior of these townships as much as I would have liked to.

From what I have seen I would consider from fifty-five to sixty per cent. of the area of these townships suitable for settlement.

The average magnetic variation I found to be four degrees and forty-five minutes west of north.

Moose and fur-bearing animals, under the present efficient administration of the Provincial game laws, are, I believe, increasing in this district.

On the timber plan submitted herewith a general idea of the location of the areas of merchantable timber may be had, but owing to the wretched travelling while on the ground it would be difficult for me to delimit them more closely.

I have the honour to be, Sir,

Your obedient servant,

(Signed) J. W. FITZGERALD,
Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 24.

SURVEY OF PART OF THE TOWNSHIP OF KEITH, IN THE DISTRICT OF SUDBURY.

TORONTO, October 12th, 1917.

SIR,—In accordance with instructions received from your Department, dated July 31st, 1916, I have the honour to report the following survey of the north part of Keith township in the district of Sudbury.

This survey was commenced on October 11th, 1916, immediately after completion of cutting of line of the township of Muskego, adjoining on the north. The work was continued until October 26th, 1916, when, owing to extremely unfavourable weather, we were compelled to temporarily cease. That portion lying east of the line between lots 12 and 13 was completed by that date with the exception of the traverse work.

In February I returned and traversed Winter-Spawning and Slate-Rock lakes. Returning again in the month of March we were obliged to leave off in April as the extreme depth of snow rendered it practically impossible to proceed with the cutting and posting of line in a satisfactory manner.

On August 1st, 1917, I proceeded with the survey, completing same on September 11th, 1917. The work was carried out in every particular in accordance with instructions. The lines were well cut out and blazed in proper manner; durable posts were firmly planted in the ground and carved by means of a scribe. Iron posts were planted in accordance with instructions and their location shown in the field notes.

The east part of the township is generally rolling with sandy soil. The centre and western part being low-lying, consisting principally of cedar and spruce swamp, the water in these swamps being held back almost entirely by the many dams constructed by beavers. By removing dams this land would be well drained and would be found quite suitable for agricultural purposes.

The township is drained on the east side by Groundhog river, on the north by Winter-Spawning and Slake-Rock lakes, on the west by Muskego creek and Muskego lake. The water in these lakes is very clear. No rapids or swift water were found except on the Groundhog river, where at a point twelve chains south-west of where said river leaves the north-east part of the township a drop of two and one-half feet occurs. Very little water power could be developed at this point as the estimate of flow was found to be only fifty cubic feet per second. Muskego creek at the south-west corner is a small, narrow, crooked creek, being twenty-five to fifty-five links in width, where concession line 6 and 7 crosses.

With the exception of the south-east corner where fire has passed through and left little standing, the township is heavily timbered. The timber is chiefly spruce, balsam, birch, poplar and jack pine. Cedar and spruce are found more plentiful in the swamps. The timber would be suitable for pulp wood, railway ties, and lumber. The soil throughout is sandy, very little clay being found, and could be utilized for agricultural purposes.

We found very few outcrops of rock and no mineral whatever. Several outcrops occur along the line of the Canadian Northern Railway, the formation of which was schist and greenstone with an occasional showing of quartz veins.

Moose, bear, wolves, fox, mink, beaver and martin are very plentiful. Pike and pickerel were caught in the rivers and lakes.

The magnetic variation was constant, being six degrees thirty minutes west of astronomical north.

I deeply regret to report that during the prosecution of this work an accident occurred, wherein one of our party, Mr. Douglas G. Arkell, lost his life. A tree located about twenty-five feet off the line fell, striking Mr. Arkell on the head, while he was engaged cutting line. Medical attendance was at once summoned and every possible service rendered to relieve, assist and comfort the injured man. Mr. Arkell died on September 6th, while being taken to Sudbury hospital.

Herewith I enclose a general plan of survey, timber map, field notes and traverse plans, all of which is respectfully submitted.

I have the honour to be, Sir,

Your obedient servant,

(Signed) R. S. CODE,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 25.

SURVEY OF LINES BETWEEN LOTS EIGHT AND NINE, TOWNSHIP OF OGDEN AND
LOTS TWO AND THREE, TOWNSHIPS OF BRISTOL AND THORNLOE.

NEW LISKEARD, ONTARIO, December 28th, 1916.

SIR,—We beg to submit herewith our report in connection with the survey of the timber limit in the townships of Ogden, Bristol and Thornloe, the limits of which were outlined in your instructions to us dated October 23rd, 1916.

GENERAL.

The above survey was made during the early part of December, although there was already an average of about eighteen inches of snow on the ground. Conditions, however, were quite favourable for making the survey as the ground was not sufficiently frozen to interfere with the proper placing of posts.

As instructed by you and as shown by our field notes attached herewith, durable wood posts were properly marked and placed at points where those lines will be intersected by the concession lines when run at some future time. All other conditions laid down in your instructions were closely adhered to.

TIMBER.

Generally speaking wooden conditions are similar to those found at other points along the Mattagami river. For approximately half a mile either way from

the river the forest growth is very good, spruce, of course, predominating. In some places, particularly in concessions 5 and 6 on the west side of the river, there are some large poplars. Balsam is also mixed through the spruce, but not to the same extent as is usually the case.

There are also some small jack pine areas, the most important of which lie in between the Lost and Mattagami rivers. A portion of this has been overrun by fire. The burned area includes part of concessions 2 and 3, lying west of the Mattagami river. That part of it included within the limits as run by us will cover approximately one square mile.

All that portion of the limit south of the Lost river is untouched by fire and is mostly well timbered with jack pine and spruce up to about fourteen inches in diameter.

There is also a small jack pine area in the vicinity of mining claims P 7727-6778 and 6781 where there is considerable timber suitable for railroad ties.

Approximately an area of one and one-half square miles lying north and west of the Mattagami river, in concession 5, has been burnt over. This originally was spruce bush and is now of very little commercial value. Along the line between lots 2 and 3 and across concessions 3, 4, 5 and 6, in the township of Bristol, the timber is mostly very small spruce. The same applies along our line across concession 3, in the township of Ogden.

SOIL.

The entire area included by this limit will, in time, be well adaptable for agriculture. There are no rock exposures that we know of and the soil is for the most part a clay loam. That part now covered by jack pine is naturally of a more sandy nature, particularly lots 2 and 3, concession 2, in the township of Bristol.

Accompanying this report are our field notes, all of which we trust will meet with your satisfaction.

We have the honour to be, Sir,

Your obedient servants,

(Signed) SUTCLIFFE & NEELANDS,

Ontario Land Surveyors.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 26.

SURVEY OF CERTAIN LINES IN THE TOWNSHIP OF NOTMAN, DISTRICT OF NIPISSING.

NORTH BAY, ONTARIO, December 30th, 1916.

SIR,—Herewith we beg to report the completion of the survey of those lines in the township of Notman, as we were instructed in your letter of the date November 25th, 1916.

In each case the remains of the original posts were found from which each of the above-mentioned lines were run north astronomically. We planted new cedar posts suitably scribed in the place of these originals. Posts were also planted at the north end of each of the three above-mentioned lines.

The lines were well cut out and blazed, and carefully chained with a 200-link chain, plumbed at each end.

Accompanying this report are the usual returns, consisting of plan, field notes, and the various affidavits, together with the account, all of which are respectfully submitted.

We have the honour to be, Sir,

Your obedient servants,

(Signed) MCAUSLAN & ANDERSON.

Ontario Land Surveyors.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 27.

SURVEY OF THE TOWNSHIP OF SWEENEY, DISTRICT OF SUDBURY.

SUDBURY, ONT., June 28th, 1917.

SIR,—According to instructions dated May 31st, I proceeded on June 8th to the township of Sweeny to run a line dividing the township into east and west halves.

Owing to the fact that the three mile post on the north boundary was located in a marsh which is now flooded with four feet of water by beaver dams, it was necessary to check from the two mile post. The ten chain tally plugs for this mile were all located and one of the reference marks for the post found.

Owing to cloudy weather only one observation was secured.

The country in general is very rough and broken.

There is considerable white pine along the line as far as the three mile post. South of this point there is a great deal of jack pine, but it is very small. The spruce, also, is in general small.

The posts were marked according to instructions to serve when the township is eventually subdivided into lots.

I have the honour to be, Sir,

Your obedient servant,

(Signed) J. RICHARD GILL,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 28.

Honourable G. H. Ferguson, Minister of Lands, Forests and Mines, Toronto, Ontario:—

DEAR SIR,—I beg to report as follows with regard to advances made to settlers in Northern Ontario:—

Number of loans made to date	1,238
Amount loaned	\$383,968 57
Total acreage covered by liens	190,087 ¼
“ “ under cultivation	21,303
“ “ ready for cultivation	4,525
“ “ improved land	25,828

The benefits derived from the ability of the settlers to secure loans of moderate amount on easy terms, are shown in the improved buildings, larger areas under cultivation, greater production of foodstuffs and increasing numbers of live stock owned by the settlers affected.

Generally speaking, the settlers appreciate the opportunity of securing funds on easy terms for the improvement of their holdings.

Yours truly,

F. DANE,

Settlers' Loan Commissioner.

Appendix No. 29.

ALGONQUIN PROVINCIAL PARK, November 1st, 1917.

HONOURABLE SIR,—I beg to hand you my report for the fiscal year ending October 31st, 1917.

Our staff has been composed of superintendent and thirty-three men, whose duty it has been to patrol the Park and see that the regulations are observed, to build shelter houses, cut portages and make such other improvements as may be required. During the trapping season the rangers have to be continually upon their sections to prevent poaching. Each two men have a section allotted to them which they are expected to patrol and keep in good order in every respect; this has all been done, and I am glad to report there have been no serious breaches of the law.

Conditions have been very much changed in the Park since the war. We miss the young men that used to come here for the fishing and canoeing who are now overseas serving their country. They have been replaced by their parents and friends, who seek in this health-giving region strength to bear the terrible strain natural to those whose dear ones are in such peril. As a health resort the Park is yearly becoming more appreciated, and we have a great many visitors whose sole desire is to breathe our pure air and wander about in the splendid woods of our Park. Many returned men, too, have come here to build up, and have been greatly benefitted by doing so.

The work of cleaning up along the railway has been continued, although we found it difficult to get sufficient men. However, it has been completed with the exception of two or three unimportant patches where fire had already run and destroyed the timber years ago. The piles also have been successfully burned and no damage done. This means a very great protection from fire from locomotives, and adds a great deal to the appearance of the Park when travelling through by train. One half of the expense of this work has been borne by the Grand Trunk Railway.

I am glad to report a splendid year so far as forest fires are concerned. We had none of any importance and any that did start were early placed under control. The Grand Trunk fire tank has been stationed here all season, and it is a splendid thing where a fire along the track is taken in time. Game of all kinds is very abundant and is increasing rapidly.



A view in the hardwood forests in the Algonquin Park.

We took out the regular quantity of furs, which were sold in Toronto, bringing \$4,574.10. I hope next year to have a much larger number. The sale of live animals has fallen off since the war, but will, I hope, revive again when it is over. We shipped three live beaver to Lanark as directed for re-stocking the waste lands there, and I have a report to the effect that they have done well and have established themselves in their new quarters. Deer are very abundant, and I have recommended that a large number be taken out and placed on the market to help out the food supply. This, I hope, you will decide to do, as hundreds could be taken along the railways at small cost and still leave an abundant supply. I am confident, also, that from some of our large lakes a great quantity of fish could be taken if necessary.

I would respectfully draw your attention to the wood supply that could be taken from the Park, especially from the burnt area, and would recommend some steps being taken, not only to turn this into fuel for the relief of the poor in our cities, but also that something be done to derive a revenue from the vast quantity

of matured hardwood on the limits acquired by your Department. It would seem a great pity to allow this to over-mature and decay.

Nine of our men are stationed along the Canadian Northern Railway which runs through almost the entire length of the Park on the north, and opens up a splendid section which, after the war, will be much sought by the angler.

We have built a new shelter at Eagle lake, and improved and repaired several of the others. Several new leases have been granted on Cache lake and a number of good cottages erected. I think we had more people in the Park than in any other year, although not nearly so many angling licenses were sold. The boys' and girls' schools were well filled, the girls' camp being composed of some seventy people including teachers and help; the boys' schools of about forty each.

We have found our telephone system a decided convenience and a great help in cases of fire. The revenue from it is small, but had we connection with Toronto and other points as we should have, there would be a much larger revenue. At present we are confined to Orillia to the south and North Bay to the north.

We have collected and sent to the Department the following sums:

For rents	\$510 00
" licenses	850 00
" live beaver	30 00
" furs	99 00
" telephone	46 59

Making a total of \$1,535 59.

This does not, of course, include revenue from furs or any moneys paid at the Department in Toronto.

Trusting the coming year may bring peace and prosperity to our country,

I have the honour to be, Sir,

Your obedient servant,

G. W. BARTLETT.

*Honourable G. H. Ferguson, Minister of Lands, Forests and Mines,
Toronto, Ontario.*

Appendix No. 30.

QUETICO PROVINCIAL PARK.

KAWENE P.O., ONT., October 31st, 1917.

To the Honourable, the Minister of Lands, Forests and Mines, Toronto, Ontario:—

SIR,—I beg to submit my report for the fiscal year ending October 31st, 1917, on the Quetico Provincial Park, of which I had the honour of being appointed Superintendent in February, 1917.

Before the ice breaking on Eva lake I secured timber and built a shelter hut 14 x 18 sided, at Kawene station, also a small stable for our horses there. This was done with very little outlay as the lumber, windows, etc., were secured from an old shack out of repair at Eva lake.

This hut has proved a great convenience in getting supplies, etc., it being convenient to the railway station. It also served as shelter for men while putting in a telephone line and also one fire ranger on the railway track during the season. About May 1st we cut a telephone line from Kawene to headquarters, but owing to lack of material as well as the dry season we did not put in the line until later. The line is about twelve miles long, running south from Kawene to the south-westerly corner of Eva lake, thence east to French lake. The wire (insulated) is laid under the C. N. R. tracks in galvanized iron piping with boards above and below to protect it. Permission was granted by C. N. R. authorities to cross their line and also to install the telephone in the station. The line was built and the phones installed by our own staff, and I am pleased to say has not cost us any repairs whatever in its four months' use. I had a saddle trail cut along the line which will be convenient in repairing the line as well as in getting out to the station in the spring and fall seasons when the water and winter routes are closed. Shelter huts were erected on Kinippi lake, and on Lake La Croix this season. Owing to a heavy hail storm in August the roofs on huts on Eden Island, east arm of Quetico and Burntside lake were destroyed, but have since been repaired. Small additions for cooking purposes have been added to the huts on Beaver House lake and Darby's island on Basswood lake. I had built on French lake a boathouse for the shelter of gasoline boat. It is protected from "ice shoves" by a pier heavily loaded with rock and serves for protection for boat for both winter and summer. I also built one on the south side of Eva lake in the same manner for the out board motor there.

Owing to the exceptionally low water this season many new portages had to be cut on the main canoe routes and when not otherwise engaged the rangers are employed cutting inland trails. I regret to say we had considerable forest fire on the south-west end of the Park which destroyed some timber, all of which I understand will be cut this season thus lessening the loss. Considering the exceptionally dry spring season and the forest fires all around us at that time, I consider that we were very fortunate on the whole. Lumbering operations are very brisk on the south-west end of the Park, but are carefully watched by the rangers. I had erected an observation tower about three-quarters of a mile from headquarters. This tower is on a very high hill and is fifty feet in height, thus giving a good view for many miles. Preparations were made for building many others next season. Game and fur are increasing rapidly, particularly moose, red deer and beaver. Partridges are also becoming more numerous. The weather during the present month has been the roughest I ever experienced at this time of year, causing great difficulty in getting in supplies.

I have the honour to be, Sir,

Your obedient servant,

HUGH McDONALD.

Superintendent Quetico Park.

Appendix No. 31.

COLONIZATION AND IMMIGRATION.

To the Honourable G. H. Ferguson, Minister of Lands, Forests and Mines, Toronto.
Ontario:—

SIR,—I have the honour to submit the following report of the Colonization and Immigration Branch for the year ending October 31st, 1917:

The following figures indicate the work of the Bureau of Colonization for that period:



School Children—Rainy River Valley.

Number of farm labourers placed	713
Northern Ontario calendars circulated	26,000
Northern Ontario booklet, "A New Land Near-by," circulated	25,000
"Ontario" handbook, circulated	5,000
"Opportunities in Ontario" (Heaton's), circulated	20,000
"Farming Opportunities in Ontario" (Farm Property Values), circulated.....	2,000
Maps, circulated	5,000
Railway certificates to settlers going to Northern Ontario—Adults	1,583
Children	141
	1,724
Number of letters received	7,244
Number of letters sent out	7,680

The farm labourers secured from the United States were generally satisfactory. Our agents had special instructions to be judicious in their selection. Had we not been careful, had we been willing to accept all applicants, we could have got two or three times as many. As it was, the number obtained exceeded the previous year by nearly a hundred.

There were 728 people who took up land in Northern Ontario last year as compared with 641 the year before. This is wonderful, considering the retarding influences of the war, especially its complete prevention of emigration from the other side of the Atlantic Ocean.

EXHIBIT AT THE CANADIAN NATIONAL EXHIBITION, TORONTO.

"The old log cabin has for many years been a landmark for exhibition visitors, but to the modern young men the new log cabin of the Northern Ontario Colonization Department will provide a greater amount of interest. The building itself is of timbers from this north country, hewn around Timiskaming, and within is a choice exhibit of grain, grasses, vegetables and small fruits which are produced in the same district.

A continuous stream of interested visitors passed through the building while W. G. Nixon, head of the Government Demonstration Farm at Monteith, dispensed information on the soil and possibilities of Northern Ontario in general.



International Highway—Port Arthur to Duluth.

Here is a country, he said, during an interview, which is pretty well settled in the southern portion. In the most northerly part the old settlers who have made their money out of the rich timber lands are gradually giving place to the modern and ambitious young farmer. There is already a direct line of settlers straight up through this country as far as Cochrane, but with abundance of room for newcomers. The Government is offering every facility to prospective settlers in the shape of cheap transportation, which includes settlers' effects, and 160 acres of land are offered to each settler at a reasonable sum, subject to the usual conditions."

GROWN TO PERFECTION.

Practically all grains are grown to perfection in this district, fall and spring wheat, oats, barley and peas attaining a prolific crop, especially the latter. The soil is pretty uniform all through, a clay foundation, rich in carbonate of lime, with a top covering of muck, which varies from six inches to two feet, this combination providing the nitrogenous food, phosphates and potash, necessary.

A big source of the wealth of Northern Ontario lies in its timber, the whole region being heavily wooded with spruce, white balsam and pulpwood, the timbers fetching from \$6.50 to \$7.00 per cord loaded on the cars.

“ The climate of this region is not unlike that of Manitoba, oats ripening in fifty days, with a yield of sixty-five bushels per acre. During the three years from 1914 to 1916 seeding was commenced by the 5th of May.

A new Government demonstration farm will shortly be opened at New Liskeard, with up-to-date stock barns, and judging pavilion. The site comprises 230 acres, 60 or 70 already fit for cultivation, the rest will be cleared. An agricultural high school will be opened on the grounds.

As far north as Charlton a Government creamery has been in operation, which makes up the farmer's cream at a cost not to exceed three and one-half cents per pound. At the Monteith Demonstration Farm, 105 miles north of New Liskeard on the line of the T. & N. O. Railway, the Government have 800 acres of land, part of which is under cultivation.



Sheep-raising, near Englehart, Northern Ontario.

PURPOSE OF DEMONSTRATION FARMS.

The purpose of these farms is to produce pure-bred stock for distribution among settlers, and to demonstrate and distribute the best grains. The Matheson demonstration plant totals forty acres under oats and potatoes. Here O.A.C. No. 3 oats are grown for distribution among settlers at a nominal price. Yet another farm is at Hearst, and it is possible Cochrane may have one in the near future.

Government offices are open at New Liskeard and Monteith in Timiskaming district; at Gore Bay, Manitoulin; at Sault Ste. Marie in Algoma; at Sudbury; at Port Arthur and Fort William in Thunder Bay district; at Emo, Rainy River district, and Kenora.

The purpose of these offices is to help out the farmer in every possible way, and a great work is done by the district representatives in charge.

"Settlers who were burnt out last year got 100 pounds of grass seed free, sufficient to cover 10 acres, and the Government loan system will enable them to purchase other seed required.

Farmers in the lower district, from New Liskeard to Englehart and Charlton, have made a success of it, and there are just as abundant opportunities in the northern portion.

Climatic conditions, changing with the clearing of the country, redound to the benefit of the settler, and there is no reason why farmers as far as Cochrane cannot be equally successful."—*Toronto World*.



Stock Farm, North of New Liskeard, Timiskaming.

EXHIBIT AT THE CENTRAL CANADA EXHIBITION, OTTAWA.

"One of the new features at the Exhibition this year that is attracting much favourable comment is the Northern Ontario Settler's Home. Situated near Howick Hall on the left of the entrance this piece of enterprise by the Department of Lands, Forests and Mines, at Toronto, is part of a campaign to bring the advantages of Northern Ontario before the people in an effective and vigorous manner. The home is tastefully laid out with two large fireplaces to insure comfort in winter, and it is one of the charms of these log buildings that, while exceedingly comfortable in the cold weather, they protect against the intense heat of summer.

Each in possession of a corner of the living room is a representative from one of the districts of Northern Ontario, proud in friendly competition with his rivals in telling of what has been achieved in agricultural production.

Kenora, the farthest west and north of the four "wild" districts, despite the handicap of a late season, has a number of shocks of grain giving evidence of pro-

fitable cultivation. Kenora district is famous for its clover seed. Staple vegetables are brought to maturity out of doors, and on account of the plenitude of clover and wild grasses the prospects for developing an extensive bee industry are good. Dairying is starting; there is one cheese factory and two creameries that have been in successful operation for some time. The Rainy River district, which adjoins Kenora to the east, has long been known as a land of promise. This year, in addition to the cultivation of grains and vegetables, the farmers have made a success of seed potatoes and helped to supply the shortage in the older parts of the Province. In Algoma district an ambitious attempt has been made to establish a fruit district, and the results that have been secured warrant continued exploitation of the hardy varieties in that climate. The nursery at St. Joe has been doing effective experimental work. The Timiskaming district, while not the oldest, is probably the best known on account of its general farming possibilities. The experimental station at Monteith has done useful service in demonstrating to the settlers the correct farming methods and ascertaining the proper varieties of seed that should be used. In each of these districts under the encouragement of the Department the live stock industry is growing, and at Sudbury, where the industrial farm is located at Burwash, a large herd of beef cattle is being raised.

Although the building has been erected to demonstrate the agricultural possibilities of Northern Ontario, the Department has arranged an instructive display of mineral products. A sample of gold from the Croesus mine, valued at \$10,000, is shown in an iron safe, while silver, cobalt and metalliferous products from the Coniagas mine and other plants in the Cobalt district give some idea of the extent of the silver industry. The Canadian Copper Company has sent samples of the copper-nickel ore that is mined in the Sudbury region, with further samples taken at each stage of manufacture until the finished product is shown. Molybdenite, iron ores, lead, mica, talc, feldspar, and a score of other minerals and metalliferous products are seen and a corps of courteous assistants are always around to give information and explain the uses to which each is put. Mr. H. A. Macdonell, Director of Colonization, is in charge."—*Ottawa Citizen*.

Almost everyone that visited the Ottawa Exhibition passed through the log cabin and received a booklet with full information on Northern Ontario.

A NEW IMMIGRATION OFFICE.

Arrangements are now being made with the Dominion Immigration Department for space in the new Union Station, Toronto. We expect to be there within a year, and in that location to facilitate greatly the work of the Bureau of Colonization.

We do not prophesy, but we venture to express our belief that the war will be over before our next report is published, when emigration to Ontario will be resumed as usual, and splendid opportunities will be opened up to rich and poor, along the lines of farming, mining and other forms of prosperity.

I have the honour to be, Sir,

Your obedient servant,

H. A. MACDONELL.

Director of Colonization.

*Appendix No. 32.*REPORT ON THE CONSTRUCTION OF ROADS AND BRIDGES, UNDER THE PROVISIONS OF
THE NORTHERN AND NORTH-WESTERN ONTARIO DEVELOPMENT ACTS,
1912 AND 1915.

(During the Season of 1917.)

To the Honourable, the Minister of Lands, Forests and Mines, Ontario:—

SIR,—I have the honour to submit to you the report of the work done under my supervision in the districts of Temiskaming and the northern part of Algoma, under the provisions of the Northern and North-western Ontario Development Acts, 1912 and 1915, from June 1st, 1917, until October 31st of that year.

Very little was done along the line of cutting out new roads except where it appeared imperative and no new bridges were built that could possibly be got along without. My efforts were confined to the building of roads and bridges that had been commenced and to the repair of others that had become well-nigh impassable.

It appears to me that it would be wise to take immediate steps to encourage the organizing of some of the townships in Temiskaming so that the Government might be relieved to some extent of the maintenance of many of these roads. Road machinery purchased and placed in the hands of organized townships, in my opinion, often serves better than making grants of money.

The following gives in detail the work accomplished:—

NEW LISKEARD, HAILEYBURY AND COBALT DISTRICT.

Haileybury and New Liskeard Road:

This road lies entirely in the Township of Bucke. This township is not able, nor has it any particular interest in maintaining this road, which forms a link in the highway between the farmers and settlers in the townships lying north, east and west of the Town of New Liskeard and the markets of Cobalt. The length of this road is 4 miles; it was graded, ditched and gravelled, several culverts were built and others repaired. The old location was poor and several diversions had to be made and one large hill greatly reduced.

North Cobalt and Lorrain Road:

This road was constructed several years ago and it had fallen into disrepair; new culverts required to be built and general repairing, ditching and gravelling was carried on for a distance of from 14 to 15 miles.

ENGLEHART DISTRICT.

In the Englehart district work was carried on in the surrounding townships as follows:

Township of Dack:

General repairing between Lots 2 and 3, across Concessions 1, 2 and 3. Building approaches to White River Bridge, Lot 8, Concession 5. Repairing road and culvert opposite Lot 3, Concession 4. Grading across Lots 1 and 2, between Concessions 5 and 6. Repairing boundary road between Dack and Evanturel, across Concession 6, and across Lots 9 and 10, between Concessions 4 and 5; across Conces-

sion 5, between Lots 8 and 9, and grading across Lots 9 and 10, between Concessions 4 and 5, and between Dack and Robillard, across Concessions 5 and 6. Grading across Concession 6, between Dack and Evanturel. Building 3 large culverts, cutting down 4 hills, ditching and grading across Lot 12, Concessions 3 and 4.

Township of Evanturel:

Building small bridge, Concession 1, building and renewing culverts, Concessions 2 and 3, all on the line between Evanturel and Ingram. Removing old bridge and building a new one over White River, Lot 7, Concession 6. Replacing old bridge with culvert and fill between Lots 6 and 7, Concession 6. Repairing wash-out opposite Lot 6, boundary of Marter and Evanturel. Building large culvert opposite Lot 4; a culvert opposite Lot 6 and grading and ditching road across Lots 4 and 5. Repairing approaches of new bridge over White River opposite Lot 6, all being on the line between Concessions 5 and 6. Repairing wash-out between Lots 11 and 12, Concession 5. Stumping and ditching across Lots 1 and 2, between Concessions 1 and 2, and ploughing road for grader. Grading and repairing culverts across Lot 12, Concessions 5 and 6, and across Concession 5, between Lots 11 and 12.

Township of Ingram:

Building culvert, ditching and grading between Lots 2 and 3, Concession 2. Chopping, stumping and ditching across Lots 1 and 2, Concession 3.

Township of James:

Building culverts, ploughing and grading across Concessions 2, 3, and 4, and stumping $\frac{1}{4}$ mile across Lot 4, Concession 4. Repairing culverts and road from Elk Lake to Moose Horn Mine.

Township of Marter:

Renewing culvert coverings and repairing the road across Lot 5, Concession 4. Grading across Concession 1, between Marter and Chamberlain. Building and repairing road across Lots 3 and 4, Concession 4.

Township of Pacaud:

Clearing right-of-way, stumping, grubbing and ditching, building culverts and grading where possible across Lot 12, Concession 2. Repairing road across Pacaud and Marquis, across Concessions 1 and 2. Removing old bridge and building new structure over Ada Creek, between Lots 4 and 5, Concession 1. Repairing road and renewing culverts between Chamberlain and Pacaud, across Lots 9 to 12, inclusive. Chopping across Lot 5, between Concessions 1 and 2. Stumping, logging and clearing right-of-way, building culverts and ditching between Lots 4 and 5, Concession 2, also across Lot 1 to the railway, between Concessions 2 and 3, and building small bridge with approaches.

Township of Robillard:

Building new culverts and cutting down hills on line between Savard and Robillard, across Lot 12 and on the line between Truax and Robillard, across Concession 1. Repairing Charlton and Elk Lake Road, across Lots 5 to 11, inclusive, in the 2nd and 3rd Concessions. Stumping, logging and laying corduroy, building new culverts, hill cutting, ditching and grading across Lots 4, 5 and 6, between Concessions 5 and 6. Ditching, building new culverts and building up road in low places across Concession 5, between Lots 3 and 4. Ditching and grading across Lot 1, between Concessions 3 and 4. Grading across Lot 1, between Concessions 3 and 4. Building new bridge and removing old structure over Sundae Creek, Lots 4 and 5, boundary Robillard and Bryce.

Township of Savard:

Repairing road, renewing culverts and gravelling in places across Concessions 1 to 6, inclusive, and grading across Concessions 5 and 6 on boundary between Chamberlain and Savard. General repairing of roads and culverts and preparing for grader, Lots 1 to 4, inclusive; building road across Lots 5 to 9, inclusive, all on line between Marquis and Savard. Grading across Lots 1 to 4, between Concessions 4 and 5, and across Concessions 5 and 6, between Lots 4 and 5. Completing road between Townships of Savard and Sharpe, across Concessions 1 and 2.

Township of Sharpe:

Building new culverts between Townships of Sharpe and Truax opposite Lot 1. Completing road across Lots 1 and 2 and stumping partly across Lot 2, between Concessions 2 and 3.

Township of Tudhope:

Stumping across Lots 7, 8 and 9, between Concessions 1 and 2.

MATHESON DISTRICT.

In the Matheson District, owing to the fire the previous year having destroyed a great number of wooden culverts, sections of corduroy and portions of the roads, which consist wholly of black muck, there being no clay available, a great deal of time was occupied and money expended in making the roads thus damaged again passable.

This section of the country is opening up quite rapidly. There is no better land to be had anywhere. Large portions of it have been entirely denuded of timber and with very little work would be ready for the plough. After the war there is no doubt the advance in this locality will be very rapid.

The work performed under my supervision was as follows:—

Township of Beatty:

Regraded one mile of gravel road across Lots 12 and 13, on the line between Beatty and Hislop. Reduced hill, regraded 4 miles and built 3 culverts on line between Beatty and Carr. Built 4 culverts on the line between Concessions 2 and 3 and reduced a hill on Lot 11. Built 4 culverts on the line between Concessions 3 and 4 and reduced hill on Lot 5.

Township of Bond:

Completed approaches to bridge on the line between Stock and Bond Townships; stumped and grubbed 30 chains between Lots 2 and 3, Concession 8; ditched 2 miles and 20 chains between Lots 2 and 3; also built 3 culverts.

Township of Bowman:

Regraded 3 miles across Concessions 4, 5, and 6; gravelled 5 chains on 6th Concession and built 4 culverts; regraded 2 miles of gravel across Lots 1 to 4, inclusive, and 4 miles across Lots 5 to 12, inclusive, on the line between the Townships of Carr and Bowman; built 1 culvert, repaired 2 others and made a fill of 200 cu. yds. on the line between Hislop and Bowman; built 2 culverts and repaired 4 others across Concessions 5 and 6 on the Trunk Road through Lot 1; built 3 bridges, each of 20-foot span, constructed 3 culverts and graded $\frac{1}{4}$ of a mile on the line between Concessions 5 and 6, across Lot 12; moved 600 cu. yds. of earth and built 1 culvert on the line between Lots 6 and 7; regraded $1\frac{1}{2}$ miles and improved 20 chains of muskeg road across Concession 3. Currie and Bowman Townships: Regraded 2 miles and built a culvert on the line between Lots 6 and 7, Matheson to Wah Tay Beg; laid 20 chains of corduroy between Concessions 4 and 5; improved road between Lots 2 and 3, across Concessions 4 and 5, and part of 6.

Township of Carr:

Graded 2 miles across Lots 1, 2, and 3, between the Townships of Taylor and Carr; built 4 culverts, regraded $3\frac{1}{2}$ miles and removed 2,000 cu. yds. of earth between Lots 4 and 5; built 4 culverts, regraded 1 mile and moved 200 cu. yds. of earth on the line between Concessions 2 and 3; built 11 culverts and 1 bridge and regraded 2 miles between Lots 2 and 3, through Concessions 1 to 4, inclusive; regraded 4 chains on the line between Concessions 3 and 4; regraded 2 miles and built 3 culverts on the line between Taylor and Carr Townships; regraded $\frac{1}{2}$ mile between Concessions 3 and 4 and built 4 culverts.

Township of Clergue:

Stumped and grubbed $1\frac{1}{2}$ miles, built 5 culverts, removed 3,000 cu. yds. of earth and gravelled 2 miles between Concessions 1 and 2; built bridge on the line between Clergue and Walker Townships; reduced a hill and widened road on Lot 12, Concession 2; built 4 culverts and repaired Trunk Road Monteith to Kelso.

Township of Currie:

Graded $\frac{1}{2}$ mile in Concession 5; repaired $1\frac{1}{2}$ miles of muskeg road across Lots 6, 7, and 8; built 3 culverts and replaced corduroy burned opposite Lots 9 and 11, between Taylor and Currie Townships. Stumped, grubbed and burned across Lots 1 and 2 and part of 3, between Concessions 4 and 5.

Township of Hislop:

Regraded $3\frac{1}{2}$ miles from Lots 5 to 11, inclusive, and built 7 culverts between Concessions 5 and 6.

Township of Playfair:

Chopped, stumped and graded $\frac{1}{2}$ mile, built 2 culverts and moved 200 cu. yds. of earth across Lot 5 on the Trunk Road from Matheson to Ramore; made a fill of 500 cu. yds. of earth approaches to Black River Bridge and 40 cu. yds. of rock for bridge piers; built 2 culverts and reduced hill across Lot 7; chopped, stumped and grubbed, and built 2 culverts opposite Lot 8, on the line between Concessions 5 and 6; chopped, stumped and grubbed between Lots 5 and 6, across Concession 5; stumped and grubbed across Lot 6, between Concessions 4 and 5.

Township of Stock:

Built 1 culvert, laid 2 chains of corduroy and graded $\frac{1}{2}$ mile across Lots 6 and 7, between Concessions 5 and 6.

Township of Taylor:

Regraded 18 chains across Lot 12, Concession 5; built 1 culvert and regraded 20 chains on the line between Concessions 5 and 6; regraded 10 miles on other roads throughout the township; repaired 2 bridges, built 2 culverts and dragged 2 miles across Concessions 3 and 4, between Lots 8 and 9; built 5 culverts on the line between Concessions 8 and 9, and through Concession 4; built 2 culverts on line between Concessions 4 and 5, across Lots 5 and 6; cut, cleared and burned across Lot 12, between Concessions 2 and 3.

COCHRANE DISTRICT.

In the Cochrane District, east and west along the T. C. Ry., and south along the T. & N. O. Ry., labour was exceedingly scarce and I found it very difficult to do all the work that required to be done. The prevailing high price for pulpwood and the presence of such industries as the Abitibi Power and Paper Company, who have a very large plant and who were enlarging it, the Mattagami Pulp and Paper Company, who were employing a large number of men, and the New Ontario Colonization Company, and various lumber companies operating in the district, were all factors that resulted in the scarcity of labour mentioned.

The work performed in this district was as follows:—

Township of Brower:

Burning across Lot 6; cutting, burning and grubbing across part of Lot 5, and ditching across Lot 6 and part of Lot 5, all between Concessions 5 and 6. Cutting, stumping and grubbing between Lots 8 and 9, Concession 5. Grubbing, stumping, ditching and grading between Lots 2 and 3, across Concession 2. Built bridge over Brule Creek, and repaired culverts along the north boundary of the Township. Built bridge on Concession 2, between Lots 2 and 3.

Township of Calder:

Ditched between Lots 12 and 13, across south part of Concession 7, and between Concessions 8 and 9, across Lots 13 to 15, inclusive. Grubbing between Lots 18 and 19, across Concessions 5 and 6. Building culverts between Lots 16 and 17, across Concession 7, and between Concessions 6 and 7, across Lot 17. Cutting and burning between Concessions 6 and 7, across lots 23 to 25, inclusive. Grubbing and ditching between Concessions 4 and 5, across Lot 1. Grubbing between Concessions 8 and 9, across Lots 23 to 28, inclusive. Grubbing between Concessions 10 and 11, across Lot 16.

Township of Culvert:

Built 11 culverts, grubbed and stumped 80 chains, graded upwards of $\frac{1}{2}$ a mile, and generally repaired $\frac{1}{4}$ of a mile on the Trunk Road from Porquis Junction to Iroquois Falls. Cut and burned 25 chains and grubbed 40 chains between Lots 5 and 6, across the north part of Concession 1, and between Lots 4 and 5, across north part of Concession 2.

Township of Clergue:

Repaired road between Lots 6 and 7, across Concessions 2, 3 and 4. Built 1 bridge, 4 culverts, and repaired the road between Concessions 3 and 4, across Lots 5 to 8. Repaired 7 culverts on the Trunk Road from Kelso to Monteith.

Township of Clute:

Built 3 culverts and repaired 200 chains of road on the line between Clute and Leitch Townships, west of Lot 2, Clute Township. Graded 50 chains along the same line across Lots 6 and 7. Built 1 bridge and 2 culverts between Concessions 2 and 3, opposite Lots 3 and 4. Ditching between Concessions 8 and 9, across Lots 13 and 14, and 24 to 28, inclusive. Ditching between Concessions 10 and 11, across Lots 27 and 28. Grubbing and ditching along the boundary of Clute and Calder, across Concessions 10, 11 and 12. Ditching between Concessions 8 and 9, across Lots 16 and 17. Grubbing and ditching between Concessions 8 and 9, across Lot 18. Ditching between Concessions 8 and 9, across parts of Lots 13 and 14.

Township of Fournier:

Grubbing and ditching between Concessions 5 and 6, across Lots 1 and 2.

Township of Fox:

Ditching between Concessions 3 and 4, opposite Lots 11 and 12.

Township of German:

Built 1 culvert, grubbed and stumped 10 chains, and repaired 26 chains of road between Lots 10 and 11, and 11 and 12, Concession 6, and on the trunk road across Lots 10, 11 and 12, Concession 6.

Township of Glackmeyer:

Built 4 culverts, repaired 7 culverts, and repaired 280 chains of road between Concessions 6 and 7, across Lots 13 to 22. Repaired 1 bridge between Lots 12 and 13, Concession 6. Repaired 140 chains between Lots 18 and 19, across Concessions 1, 2 and 3. Built 1 culvert and repaired 8 chains between Lots 18 and 19, Concession 3. Repaired 10 chains between Concessions 2 and 3, Lot 23, and graded 59 chains between Lots 24 and 25, Concession 2. Built 2 culverts and repaired 10 chains on the boundary between Glackmeyer and Clute, across part of Concessions 10 and 11. Built 2 bridges, Concessions 6 and 7, Lots 12 and 13. Repaired 1 bridge between Lots 12 and 13, Concession 6, and on Lot 28, Concession 8. Laid 13 chains of corduroy, stumped and grubbed 13 chains on boundary between Glackmeyer and Blount, Lots 15 to 18, inclusive.

Township of Kennedy:

Built 2 culverts, stumped and grubbed 30 chains, and generally repaired 120 chains on the south boundary of the township, across Lots 18 to 27, inclusive. Cut, burned and ditched 119 chains, stumped and grubbed 40 chains, and built 3 culverts between Lots 18 and 19, across Concessions 1 and 2. Ditched 20 chains between Concessions 2 and 3, opposite Lot 18. Built 1 bridge between Concessions 2 and 3, across Succor Creek, opposite Lot 17.

Township of Lamarche:

Built 6 culverts, removed 40 chains of corduroy, graded 80 chains and repaired 440 chains between Lots 10 and 11, across Concession 6, along the north boundary across Lots 9 to 12, inclusive, and along the west boundary, across Concessions 4 to 6, inclusive. Repaired 1 bridge, built 3 and repaired 7 culverts, and improved the road between Lots 8 and 9, across Concessions 3, 4, 5 and 6. Built 4 culverts, stumped and grubbed 25 chains, ditched 25 chains, and graded 480 chains across the north boundary of the township, from Lot 6, Lamarche, to Lot 7, Brower. Grubbed 20 chains, ditched 69 chains, between Lots 10 and 11, across Concessions 3 and 4. Cut 40 chains, burned $6\frac{1}{2}$ chains, and grubbed 11 chains between Concessions 5 and 6, across Lot 4, and between Lots 4 and 5, across south part of Concession 6. Repaired 10 chains along boundary of Lamarche and Fournier, opposite Concession 12. Grubbed 79 chains and ditched 115 chains between Lots 2 and 3, across south part of Concession 4, and between Concessions 3 and 4, across Lots 4 and 5. Burned 12 chains and grubbed $13\frac{1}{2}$ chains between Concessions 5 and 6, across part of Lot 4.

Township of Leitch:

Removed 30 chains of corduroy and graded 30 chains on boundary between Leitch and Blount, across Concessions 2 and 3; repaired 2 culverts and graded up to them on the same boundary opposite Concession 6. Ditched 16 chains on the Leitch and Blount boundary opposite Concession 1.

Township of McCart:

Cutting, burning and grubbing 100 chains between Concessions 4 and 5, across Lots 1 to 6, inclusive. Cutting and burning $39\frac{1}{2}$ chains and grubbing 11 chains between Concessions 2 and 3, across Lot 2.

Township of Newmarket:

Cutting, burning and grubbing 18 chains between Concessions 3 and 4, across Lots 3 to 5, inclusive. Cutting 168 chains and burning 83 chains between Concessions 5 and 6, across Lots 3, 4 and 5, and between Lots 2 and 3, across Concession 6.

Township of Shackleton:

Cutting and burning 25 chains across Lot 23, Concession 12, and Lot 18, Concession 11. Cutting and burning 14½ chains across Lot 20, Concession 12. Cutting, burning and grubbing 26 chains across Lot 22, Concession 12. Cutting and burning 26 chains across Lots 15 and 16, Concession 11. Cutting 26 chains across Lot 14, Concession 11.

Township of O'Brien:

This township is being settled with the returned soldiers' and sailors' colony. About ½ a mile of railway grade for a siding was constructed, and ½ a mile of road, together with two bridges on the east side of the Kapuskasing River. Our saw-mill at Kapuskasing also operated for a short time at a cut that had been taken out the previous season. The lumber from this mill, as well as all the one inch and two inch lumber cut at Barber's Bay and Connaught, on the Porcupine Branch of the T. & N. O. Ry., was used in the buildings for the colony.

THE DISTRICT OF ALGOMA.

In the vicinity of Hearst, which is in the District of Algoma, for some reason or other, settlement has not been very rapid although the soil is excellent. The war probably has more to do with the lack of settlement than anything else. Labour was scarce here also, most of the settlers being engaged in the cutting of pulpwood. A considerable quantity of this pulpwood was shipped south over the Algoma Central Railway to the pulp mills at Sault Ste. Marie.

Work was done in the following townships in this district as follows:—

Township of Casgrain:

General repairs between Lots 24 and 25, Concession 3, and along Lots 24 to 27, inclusive, on line between Concessions 2 and 3. Repairing boundary line between Casgrain and Kendall, opposite Lots 17 and 18. Cutting and burning across Lots 14, 15 and 16, Concessions 6 and 7.

Township of Hanlan:

Cutting and burning on Trunk Road across Lots 26, 27 and 28, Concession 2. Cutting and burning on line between Lots 18 and 19, Concessions 1 and 2. Cutting and burning on Trunk Road across Lots 23, 24 and 25, Concession 2.

Township of Kendall:

Building culverts and grading between Lots 18^e and 19, Concession 11. Repairing Trunk Road partly across Lots 14 and 15, Concession 10. Building culvert and grading on road across Lot 27, Concession 10. Building culvert, laying corduroy and making repairs on road between Lots 24 and 25, Concession 11.

PORCUPINE DISTRICT.

In this district most of the work was done in the Township of Mountjoy, which is the only township lying close to the Porcupine Mining Camp which has been opened for settlement. Much of the land in this township is of fine quality and there is a good market for everything produced, at the mines. The Mattagami River, which flows through this township, is crossed at the present time, during the summer months, by means of a ferry. This is not altogether a satisfactory arrangement, as there are certain seasons of the year, in spring and fall, when the river cannot be crossed, but, owing to this being a navigable stream a bridge would be an exceedingly expensive proposition, as it would have to be constructed to allow the passage of small steamboats up and down the river. As soon as conditions become normal, I would recommend that the construction of this bridge receive serious consideration.

The following is a description of the work performed in this district:

Township of Mountjoy:

On the road on the west side of the Mattagami River $3\frac{1}{4}$ miles were ditched, $1\frac{1}{2}$ miles gravelled, $\frac{3}{4}$ of a mile graded and 6 culverts built. On the south side of the Mattagami River there were graded 150 rods and gravelled 180 rods; a bridge was built across the Mountjoy Creek and $3\frac{3}{4}$ miles were cut, burned and grubbed. On the east side of the river there was 1 mile cut, burned and grubbed.

In addition to the above the Trunk Road from Golden City to the Mattagami River was surfaced with gravel $1\frac{1}{2}$ miles and with about 200 yards of rock. On the Hayden Road and on the road along the line between the Townships of Tisdale and Mountjoy, 2 miles of ditching, $1\frac{3}{4}$ miles of grading, $\frac{1}{2}$ a mile of gravelling and 300 feet of corduroying were done. A road-drag was also used upon this road for 12 miles and 11 culverts built.

This completes the list of the work performed under my supervision from June 1st to October 31st, 1917, under the provisions of the Northern and North-western Ontario Development Acts, of 1912 and 1915, all of which is respectfully submitted.

I have the honour to be, Sir,

Your obedient servant.

C. H. FULLERTON.

*Acting Director, Northern Development
Branch, District of Temiskaming.*

Dated at Toronto,
October 31st, 1917.

*Appendix No. 33.*REPORT ON THE CONSTRUCTION OF ROADS AND BRIDGES, UNDER THE PROVISIONS OF
THE NORTHERN AND NORTH-WESTERN ONTARIO DEVELOPMENT ACTS,
1912 AND 1915.

(During the Season of 1917.)

To the Honourable, the Minister of Lands, Forests and Mines:—

SIR,—I have the honour to submit the general report of the work done in the construction of roads and bridges, under the provisions of the Northern and North-western Ontario Development Acts, 1912 and 1915, during the season of 1917.

Operations were carried on over practically the same territory as in previous years, in the Districts of Rainy River, Kenora, Port Arthur and Fort William, Sault Ste. Marie, St. Joseph Island, Manitoulin Island, Algoma, Sudbury, Nipissing and Parry Sound, as far south as Sundridge, also in the Districts of Temiskaming in the vicinity of Englehart, Matheson and Cochrane, up to the last of May.

The work, during the early part of the season, was somewhat retarded owing to wet weather; the greater portion of the season, however, was very favourable for road construction, except that labour was difficult to procure and wages were exceptionally high; so, also, was the price of food supplies and material. The labourers employed on the work were chiefly settlers or those living in the districts. During the seeding, haying and harvesting seasons the work was postponed so as to give the settlers every opportunity of carrying on their farm work. Good results were obtained in most instances for the money expended, notwithstanding the high price of labour and supplies.

During the season, up to the 31st of October, \$485,493.33 was expended on construction and repairing of roads, and purchase of plant. Approximately 275 miles of road, new and old, was worked over during the season, of which 55 miles was entirely new road, the balance being roads cut out in previous years and graded, improved and surfaced with gravel or rock; 10 miles of road was re-surfaced with crushed rock and 125 miles surfaced with gravel; 6 bridges, over 100 feet in length, and 20 bridges, over 30 feet in length, were constructed; 281 corrugated iron culverts were put in place, and 200 wooden culverts constructed. Most of the old roads built in the last five years were gone over with road drags or small graders, and ditches cleaned out.

During the season the International Highway from Port Arthur and Fort William to Duluth was opened up for traffic. Fifty miles of this road is within the Province and has been constructed and almost completed within the last four years. It is now possible for the residents of Port Arthur and Fort William to reach the larger cities in Minnesota and Wisconsin by motor car.

Five years ago it was not possible to leave the Town of Fort Frances, in the Rainy River Valley, with a motor car; it is now possible to motor from Fort Frances to the City of Winnipeg, the distance having been made in seventeen hours.

The trunk road between North Bay and Sudbury, 80 miles, was also opened for through traffic in October, the distance having been covered in three and one-half hours.

The North Bay and Bracebridge trunk road has been practically completed to Sundridge, a distance of 50 miles, and from North Bay to Mattawa, 50 miles.

These roads, and numerous other trunk roads, are constantly requiring repairs, and the cost of maintenance in the future will be very considerable. The construction of roads into the different farming sections has greatly assisted the settlers in marketing their produce, and in many cases has increased the value of their lands from \$2.00 to \$5.00 per acre. The construction of new roads to the different mining camps, constructed within the last six years, has added greatly to the comfort of the miners and their families living and operating in the mining districts. Perhaps the greatest benefit in the building of these roads is the opportunities it has given to the children in the rural districts of reaching schools. The construction of the many trunk and other roads during the last six years has had much to do in the opening up of the new agricultural districts along the Temiskaming and Northern Ontario Railway, and its branches, and east and west from the Town of Cochrane along the Canadian Government Railways (Grand Trunk Pacific).

Attached hereto are statements of expenditures for the year ending October 31st, 1917, in the various districts, and a summary of expenditures for the last six years.

I have the honour to be, Sir,

Your obedient servant,

J. F. WHITSON,

Commissioner.

SUMMARY OF EXPENDITURE FOR THE SIX YEARS ENDING 31ST OCTOBER, 1917.

Description.	Year ending 31st Oct., 1912.	Year ending 31st Oct., 1913.	Year ending 31st Oct., 1914.	Year ending 31st Oct., 1915.	Year ending 31st Oct., 1916.	Year ending 31st Oct., 1917.	Total Expenditure.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Sec. 1 (a), Works and Improve- ments (Sewer at Hearst).....	.....	.....	2,100 00	.....	.....	.....	2,100 00
Sec. 1 (b), Roads.....	193,082 80	1,081,172 28	791,443 08	582,914 80	513,533 75	485,493 33	3,647,640 04
Sec. 1 (d), Farms.....	.....	.....	9,035 11	8,075 68	10,125 53	18,181 52	45,417 84
Sec. 1 (e), Creamery, New Lis- keard.....	.....	.....	.....	.....	.....	15,624 86	15,624 86
Sec. 3 Seed Grain.....	.....	.....	.....	98,920 26	24,916 63	31 50	123,868 39
Returned Soldiers' and Sailors' Settlement Act, 1917.....	.....	.....	.....	.....	.....	138,812 05	138,812 05
Clause 5 (Amending Act 1916)	193,082 80	1,081,172 28	802,578 19	689,910 74	548,575 91	658,143 26	3,973,463 18
Settlers Loan Account.....	.....	.....	.....	.....	26,370 98	370,731 99	397,102 97
	193,082 80	1,081,172 28	802,578 19	689,910 74	574,946 89	1,028,875 25	4,370,566 15

ARTHUR E. D. BRUCE,
Secretary and Accountant.

STATEMENT OF EXPENDITURE UNDER NORTHERN & NORTH-WESTERN ONTARIO DEVELOPMENT ACTS, 1912 AND 1915.

(From 23rd May, 1912 to 31st October, 1917.)

District.	Expenditure to 31st October, 1916.	Expenditure year ending 31st October, 1917.
1. District of Nipissing and Parry Sound; North Bay to Mattawa; and east to Petawawa Military Camp, and Pembroke, and south of Callander to Powassan, Trout Creek, South River and Sundridge, and west from North Bay through Sturgeon Falls	\$324,183 64	\$27,184 11
2. District of Temiskaming, Haileybury, Englehart, Matheson, Charlton, Swastika, Elk Lake, Larder Lake..	487,987 94	91,254 55
3. District of Temiskaming, Cochrane, Porcupine, Iroquois Falls and Transcontinental Railway from Quebec boundary west, 125 miles to Groundhog ..	780,868 35	64,917 31
4. District of Sudbury, vicinity of the town of Sudbury and Mining District surrounding, and Sudbury-North Bay Road	234,733 96	105,602 54
5. District of Algoma, vicinity of Hearst, along Transcontinental and Algoma Central Railways	102,355 63	8,241 95
6. District of Algoma, on Sudbury and Sault Ste. Marie Trunk Road	230,766 51	34,544 37
7. District of Thunder Bay, tributary to Port Arthur and Fort William	416,813 79	40,204 96
8. District of Kenora, vicinity of Kenora and Keewatin..	169,080 27	15,024 26
9. District of Rainy River, in Rainy River Valley	327,832 16	60,594 27
10. Algonquin Provincial Park	14,391 27	347 24
11. Manitoulin Island	9,269 30	8,203 92
12. St. Joseph Island .....	.....	12,139 17
13. Experimental Farm Plots	27,236 32	18,181 52
14. Creamery, New Liskeard .....	.....	15,624 86
15. Seed Grain	123,836 89	31 50
16. General Administration Expenses	65,963 89	17,234 68
17. Soldiers' Settlement Account .....	.....	138,812 05
18. Settlers' Loan Account	26,370 98	370,731 99
	<hr/> \$3,341,690 90	<hr/> \$1,028,875 25

ARTHUR E. D. BRUCE,
Secretary and Accountant.

STATEMENT OF EXPENDITURE, YEAR ENDING 31ST OCTOBER, 1917.

The Making of Roads:

Grigg, A., Deputy Minister, salary	\$400 00	
Whitson, J. F., Commissioner, salary	4,500 00	
Bruce, A. E. D., Secretary and Accountant, salary	2,933 00	
Beardall, F. G., Clerk (on active service) salary	1,461 70	
Dower, A. R., Clerk (on active service) salary	988 45	
Reid, A., Clerk (on active service) salary ..	693 84	
Lawer, W. L., Bookkeeper, salary	921 63	
Laidlaw, Miss B., Stenographer, salary	766 17	
Extra Clerks	4,569 89	
		\$17,234 68
Wages ..	\$270,835 83	
Contracts ..	39,435 70	
Supplies and equipment	157,987 12	
		<hr/> 468,258 65
		<hr/> \$485,493 33

Advancement of Settlement and Colonization:

Wages	\$4,174 95	
Land, New Liskeard Farm	10,500 00	
Supplies, stock and equipment	3,506 57	
		18,181 52

Creamery at New Liskeard:

Wages	\$787 69	
Contracts	8,853 00	
Supplies and equipment	5,984 17	
		15,624 86

Seed Grain:

Postage and expenses	\$31 50	
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*Returned Soldiers' and Sailors' Land Settlement Act—**Montcith and Kapuskasing:*

W. G. Nixon, Superintendent, salary	\$743 57	
Wages	40,027 14	
Contracts	14,109 20	
Construction of training school, settlers' houses, dormitories, store and quarters, railway siding, mill, etc., equipment and supplies	83,932 14	
		138,812 05

\$658,143 26

Settlers' Loan Department:

Dane, F., Commissioner, salary	\$5,000 00	
Kennedy, W. K. P., Accountant, salary	2,500 00	
Crawford, G., Stenographer, salary	682 33	
Taylor, N., Stenographer, salary	252 00	
Chester, Thos., Supervisor, salary	496 00	
		\$8,930 33

Net amount of loans issued	\$360,078 88	
Expenses	1,722 78	
		361,801 66

370,731 99

\$1,028,875 25

NOTE.—Repayments of principal, interest, etc., \$6,893.34.

ARTHUR E. D. BRUCE,
Secretary and Accountant.

SPECIAL WARRANT ACCOUNTS.

ADMINISTERED BY THE NORTHERN DEVELOPMENT BRANCH.

EXPENDITURE TO 31ST OCTOBER, 1917.

\$60,000 00—Order-in-Council dated 30th September, 1916:—

Erection of log houses at Toronto and Ottawa Exhibitions	\$3,970 73	
Free seed grain for seeding down burnt lands..	8,751 16	
Settlers' relief stores	122 19	
Settlers' cattle fed and looked after during winter 1916-1917	14,268 10	
Settlers' team account, distributing lumber and supplies to settlers burnt out	1,072 68	
Cement sidewalks	876 68	
		\$29,061 54

1,500 00—Part of Order-in-Council, 10th October, 1916—

Erection of schools at Matheson and Porquis Junction	1,484 92	
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1,500 00—Order-in-Council dated 24th January, 1917—

Seeding down roads and vacant land	465 16	
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25,000 00—Order-in-Council dated 20th February, 1917—

Purchase of cattle and other live stock		
Cost of cattle purchased (220 head, including calves) and expenses in connection therewith	\$19,867 70	
Cost of rams purchased (15)	400 00	
		20,267 70

REVENUE.

Proceeds of sale of cattle, butter, milk, etc.	\$16,249 49	
13 cows unsold.		
15 rams unsold.		
10,000 00 —Order-in-Council dated 18th May, 1917—		
Purchase of horses		
Cost of 17 horses and expenses in connection therewith		3,864 18

REVENUE.

Sale of 3 horses and refund	648 75	
14 horses unsold.		
3,000 00—Order-in-Council dated 18th May, 1917—		
Returned soldiers' recreation account		
Expenditure to date		679 84
15,000 00 —Order-in-Council dated 26th September, 1917—		
Special fares for returned soldiers		
Expenditure to date		508 65
		<u>\$56,331 99</u>

ARTHUR E. D. BRUCE,
Secretary and Accountant.

NORTHERN DEVELOPMENT BRANCH.

SEED GRAIN.

Amount refunded by Settlers for Seed Grain Supplied.

October, 31st, 1915, by notes retired and cash paid	\$3,171 36
October, 31st, 1916, by notes retired and cash paid	29,320 00
October, 31st, 1917, by notes retired and cash paid	18,119 04
Total refunded, 3 years ending 31st October, 1917	<u>\$50,610 40</u>

RECORD OF CORRESPONDENCE.

For year ended 31st October, 1917.

Letters received	5,699
Letters mailed	5,442
Circulars mailed	967
	<u>6,409</u>

ARTHUR E. D. BRUCE,
Secretary and Accountant.

DISTRICT OF TEMISKAMING.

Vicinity of Englehart and Charlton.

Work on the construction of bridges was continued throughout the winter of 1916-17.

On the road between Concessions 5 and 6, Township of Evanturel, the bridge partly constructed the previous season, and damaged by the spring freshet of 1916, was re-constructed; the bridge is built on cedar piles and piers, the length, including abutments, is 300 feet, three spans of 60 feet clear, two spans 28 feet and one 16 feet.

The iron bridge built eight years ago on Lots 10 and 11, Township of Marter, was found to be too low and was raised six feet. New approaches were built to each end as the old approaches had been washed away during the spring freshet of 1916.

A new bridge was constructed near the village of Charlton, across the Blanche River on Lots 10 and 11, Concession 5, Township of Daek, 136 feet long, two spans of 50 feet and one of 36 feet, with stone abutments and stone-filled pier.

On the townline between Bryce and Robillard, Lot 4, a bridge was partly constructed.

The balance of the work in this district, under my supervision up to the 1st of June, consisted in re-grading and repairing old roads, constructing culverts and repairing washouts caused by the spring freshets.

MATHESON DISTRICT.

Work performed from November, 1916, to June 1st, 1917.

Kirkland Lake Road:

Hauled 654 cu. yds. of rock from Swastika to Kirkland Lake on Kirkland Lake Road.

Beatty Township:

Built two small bridges, 20 ft. span, and two culverts 3 ft. x 4 ft. x 20 ft. on Lots 9 to 13, Concessions 3 and 4.

Carr Township:

Built three small bridges, 18 ft. span, and four culverts 4 ft. x 4 ft. x 20 ft. on Lots 5 to 8, between Concessions 2 and 3.

Hislop and Beatty Townships:

Built pile bridge across Painkiller Creek on Munro Road, two 18 ft. spans and two 16 ft. spans, on Lot 11, line between Hislop and Beatty.

Stock Township:

Repaired floating bridge across Driftwood River on line between Concessions 5 and 6.

Gravelled Trunk Roads in the Vicinity of Matheson as follows:

Main Street, Matheson, to junction of Porcupine road and trunk road..	1,518 cu. yds.
From junction of Porcupine road along trunk road	583 "
From Wah Tay Beg Station to junction of townline between Taylor and Carr along trunk road	1,320 "
From junction of trunk road and Porcupine road along Porcupine road	1,340 "
From Black River bridge, Matheson, east along Munro road	5,280 "
From Munro road north on townline between Beatty and Carr	110 "
From railway crossing at Matheson along trunk road south	163 "
Town of Matheson main streets	576 "

Approximately 10,890 cu. yds. of gravel was hauled on to the trunk roads leading into the Town of Matheson, surfacing $6\frac{1}{4}$ miles of road.

Taylor and Stock Townships:

Built bridge across Driftwood River on townline between Taylor and Stock; one pile bridge with two 60 ft. spans and one 16 ft. span at each end, to replace old bridge burnt August, 1916.

Playfair Township:

Cut winter road through S. $\frac{1}{2}$ Lot 5, Concession 6, 20 ft. wide, 880 yards, to enable settlers to get to Ramore Station. Built pile bridge across Black River on line between Concessions 5 and 6, Lot 3; two 60 ft. spans and two 16 ft. spans.

Benoit Township:

Built pile bridge on line between Concessions 1 and 2, 170 ft. long, across White Clay River, at Bourkes Station on the T. & N. O. Ry. Repaired Black River bridge in Town of Matheson.

TEMISKAMING DISTRICT.

Vicinity of Cochrane, East and West.

Work was commenced early in May repairing roads burnt out the previous summer. Twenty small ditching, burning and cutting of right-of-way contracts were let, in the Townships of Fournier, Clute, Lamarche, Calder, Newmarket, Fox, Shackleton, McCart and Newmarket. Besides these small contracts, five small bridges were constructed, two repaired, 14 culverts constructed, and roads re-graded and repaired. Four and one-half miles of new road was cut out and grubbed.

During the winter season a camp was at work at Barber's Bay, on the Porcupine Branch of the Temiskaming and Northern Ontario Railway, taking out bridge timber and piles: 228,500 ft. B.M. of pine was taken out and cut into bridge timber and lumber, and 130 bridge piles taken out.

The bridge and dam across the Frederickhouse River at Connaught was completed. The dam and bridge has a length of 547 ft. The dam, as now constructed, is a series of cribs filled with stone and faced with hewn timber; it is very substantial. We are now able to regulate the depth of water in the river above the

dam and on Night Hawk Lake and River, thus making the lake and river above the dam navigable for boats and small tugs for nearly 30 miles. Mining companies and lumbermen can now use this water stretch during the summer season for hauling ore, and towing logs or pulpwood.

My operations in this district ceased on June 1st.

NORTH BAY, SUNDRIDGE AND BURK'S FALLS TRUNK ROAD.

17 miles of road graded and partly cut out.

8 miles of road surfaced with gravel.

12 miles of road repaired, dragged and gravelled in places between Powassan and South River.

65 culverts placed—14 iron and balance wood and stone.

800 yards in length of tap drains dug.

Work was continued on the North Bay and Burk's Falls trunk road about the 18th of May, as soon as the settlers had finished their spring seeding. The road, with the exception of gravelling in places and other slight repairs, had been completed as far south as the Village of South River, 40 miles from North Bay, the previous season. From South River south to the Village of Sundridge, a new road was selected running south along the Grand Trunk Railway, in places, and crossing to the east of the railway, entering the Village of Sundridge from the east along the shore of Stony Lake. The new road has fewer grades than the old to contend with: it is shorter in distance. On the new road $\frac{3}{4}$ of a mile of swamp was met, which required considerable grading and ditching. The road to Sundridge is now well graded and ditched, and gravelled where found necessary. The greater portion of the road passes through a sandy or sandy loam section. The road was continued south-westerly from Sundridge for a distance of $2\frac{1}{2}$ miles: two diversions to avoid bad grades were found necessary in that distance, on the old road now travelled to Burk's Falls. From the end of the road, as now finished, the present travelled road follows as good a route as is possible to select. This road requires re-grading and gravelling in places, and repairing culverts and small bridges.

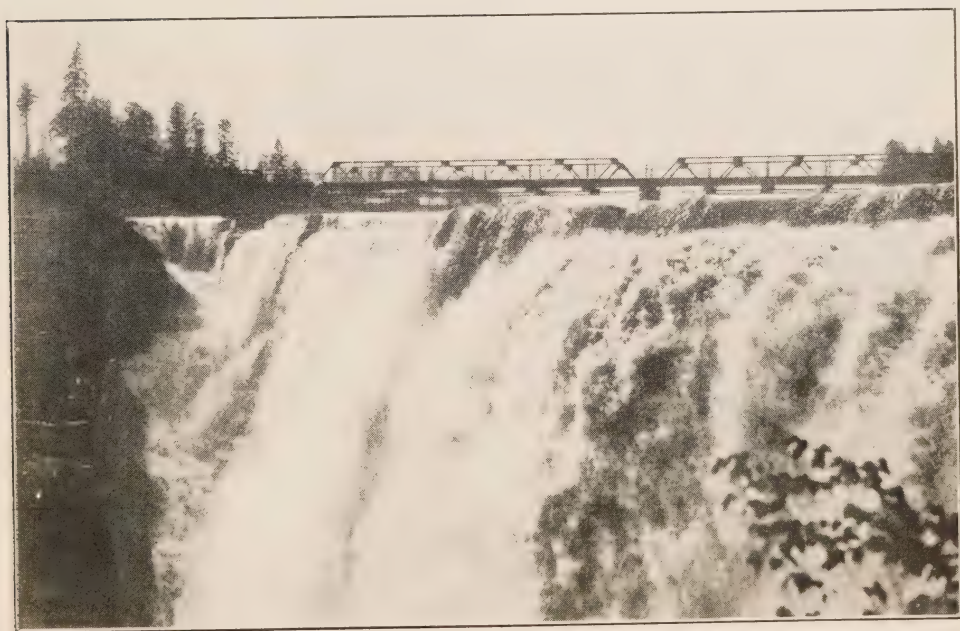
The trunk road constructed between Callander and Powassan, in previous years, and between Powassan and South River, was repaired with the road drag and small grader early in May, for 12 miles, and about $2\frac{1}{4}$ miles surfaced with gravel where most required.

In addition to the main trunk road a short trunk road was constructed along the 12th and 13th Concession line from the Village of Powassan easterly into the Township of Chisholm; the distance to the Chisholm boundary from Powassan is $5\frac{1}{2}$ miles. The old road was a mere winter road in places, the country being very broken until the Township of Chisholm is entered, where there is found a considerable area of fine land and a very prosperous settlement. The road was widened and well graded for about 4 miles, and 2,200 yards of gravel placed thereon. The remainder of the road into Chisholm was repaired, but, owing to the wet season interfering, was not gravelled. Last season was not very favourable for road construction, partly owing to the amount of rainfall, but, chiefly owing to the difficulty in procuring labour; work was suspended during the haying and harvesting.

There is now a very fair automobile road from North Bay to Sundridge, the distance being nearly 50 miles. From Sundridge to Huntsville large sections of the present travelled road have never been graded, although passable for motor cars



The Espanola Water Power on the Spanish River showing Algoma Eastern Railway Crossing.



Kakabeka Falls.

during the dry seasons. A fair percentage of the country is a light sandy loam, with abundance of gravel or road material. The country along the road is fairly well settled. The repairing of this road through to Huntsville or Bracebridge would not cost a very great deal, taking into consideration the distance between Sundridge and Huntsville.

NORTH BAY AND TROUT LAKE ROAD.

The North Bay and Trout Lake Road, passing through part of the Township of Widdifield and part of the Township of Ferris, was re-gravelled and repaired during the months of June and July for a distance of $7\frac{1}{2}$ miles.

PEMBROKE AND PETAWAWA MILITARY CAMP TRUNK ROAD.

The trunk road between the Petawawa Military Camp and the Town of Pembroke, graded by this Branch in 1914 and surfaced with gravel and crushed rock in 1916, owing to the heavy traffic between the Town of Pembroke and the Military Camp with motor cars and trucks—averaging during the summer months from 100 to 200 vehicles per day—became rutted in places and it was found necessary to repair this road. Screened coarse gravel from a pit at Petawawa Station was hauled by rock cars and traction engine for 8 miles over the western part of this road, and crushed rock from the Pembroke town quarry over the eastern part. The grade at the east end of the Petawawa bridge was also reduced to almost a level. The road was left in splendid condition last October; 10 miles of this road was re-gravelled.

NORTH BAY AND SUDBURY TRUNK ROAD.

Number of miles of road repaired, graded, surfaced and re-surfaced 50
 of which 11 miles was graded, 16 miles surfaced with gravel, and the
 balance re-graded with small grader and re-surfaced in places or
 repaired.

Work was carried on on this road throughout the winter of 1916-17 and up to the end of October, 1917. During the winter of 1916-17 the road was surfaced with gravel in places between Wahnapiatae Station and a point about 5 miles east of Markstay. One bridge, 75 ft. long, was constructed over the Veuve River $2\frac{1}{2}$ miles east of Markstay; also, two bridges, 30 ft. in length, were constructed across the same stream and a tributary, between Markstay and Stinson. Grading and ditching was completed on $10\frac{1}{2}$ miles between Markstay and Wahnapiatae. Sixteen miles of this road was re-surfaced with gravel between Wahnapiatae Station and a point 5 miles east of Markstay. Forty corrugated iron culverts were placed east of Markstay, and 75 wooden culverts constructed between Markstay and Wahnapiatae. Between Sturgeon Falls and North Bay, 23 miles, repairs were made, and the road run over with a small grader, also between Verner and Warren, a distance of 17 miles. Two 40 in. corrugated iron culverts, 80 ft. and 120 ft. in length, were placed at Sturgeon Falls. At Wahnapiatae Station 350 cu. yds. of rock was taken out and the road graded across the Canadian Pacific Railway Company's station



The Rotary Club, Port Arthur and Fort William, en route to Grande Marais.



A view of the Hearst range of mountains on the International Highway, Port Arthur and Fort William to Duluth.



The International Bridge between Ontario and Minnesota, across the Pigeon River, on the International Highway.

grounds. The road between Wahnapiatae Station and Sudbury, a distance of 12 miles, was repaired and rolled with a ten ton steam roller. The road between Sudbury and North Bay, a distance of 80 miles, was opened for through traffic about the first week in October. There is now a good trunk road between these two towns. Settlements have been located in places along the Canadian Pacific Railway between these two towns for the last thirty years, but up to the present time there has been no communication or connection between North Bay and Sudbury by road. The road throughout has been well ditched and graded; it has few bad grades. There are still, however, a few sections that will require re-surfacing with gravel, more particularly the section between Meadowside and Sturgeon Falls and between Warren and Hagar, which will take part of a season to complete.

ROADS IN THE DISTRICT OF SUDBURY.

The Sudbury, Murray Mine and Azilda Trunk Road.—The macadamized road between Sudbury and the Murray Mine, constructed five years ago, was re-surfaced with crushed rock and rolled for a distance of 4 miles, and was continued westward for a further distance of 3 miles to the Village of Azilda, on the Canadian Pacific Railway; this road was graded five years ago. It passes through a section where the soil is either clay or quick sand. It is a road over which there is heavy traffic to the mines and from the farming country in the Chelmsford and Vermilion River valleys. Seven thousand one hundred cubic yards of rock were crushed and placed on the road and 900 cu. yds. of gravel used in the construction of the road. The road was well re-ditched, re-graded and rolled, and is now in first-class condition.

The road between Levack Station and the Village of Levack, near the Mond Nickel Company's nickel mines, as constructed last season, was completed this season. Three and one-half miles of the road was surfaced with gravel and a bridge constructed across the Onaping River, near the Village of Levack, and a second bridge across a small stream.

The Ramsay Lake and Broder Township road was repaired and surfaced with gravel in places, for a distance of 3 miles.

The road from Coniston Station to Dill Siding, Township of Dill, was repaired in places and about a mile of new road cut out and graded.

A winter road was cut out a distance of 10 miles, commencing at a point on the West Shining Tree road $15\frac{1}{2}$ miles north-east of Kashbaw Station, on the Canadian Northern Railway, and running north-westerly a distance of 10 miles into the Township of Connaught, for the purpose of giving access to the copper locations about the centre of said township.

On the West Shining Tree water route a new dam was built, replacing an old one damaged by the spring freshets. This dam is used in connection with holding the water for navigation purposes between the Canadian Northern Railway and West Shining Tree.

Espanola and Webbwood Trunk Road, and Espanola Hill:

The stage road between Espanola Station, on the Canadian Pacific Railway, and the Village of Espanola, at the Spanish River Pulp and Paper Company's mills, was re-graded and re-surfaced with a heavy coat of gravel for a distance of $11\frac{1}{8}$ miles, and the trunk road to Webbwood was re-gravelled for a distance of $11\frac{1}{4}$ miles.

The Espanola Hill from the Spanish River bridge into the Village of Espanola was cut down and a retaining wall of hewed cedar timber constructed for a distance of 270 ft. with an average height of 10 ft. The roadway was widened to a width of 24 ft. and a good substantial railing placed thereon. The hill was well graded, ditched and surfaced with gravel.



Richard's Landing, St. Joseph's Island.

Spanish River and Cutler Trunk Road:

The trunk road between Spanish River Station and Cutler Station, on the Sudbury and Sault Ste. Marie trunk, was re-graded for a distance of $6\frac{1}{2}$ miles, and 4 miles of this was re-surfaced with gravel, one wooden bridge, 20 ft. span, was constructed near Spanish River Station, and 32 corrugated iron and wooden culverts were placed where required between Spanish and Cutler. Cutler is now the end of the Sudbury and Sault Ste. Marie trunk road from the east. From Cutler to Algoma Mills there is a gap of about 15 miles still to be constructed to connect Sudbury and Sault Ste. Marie.

SAULT STE. MARIE AND SUDBURY TRUNK ROAD.

Work was commenced on the Sault Ste. Marie and Sudbury trunk road in February, 1917, at Blind River, where a bridge 375 ft. long was constructed across the west branch about 2 miles west of the Town of Blind River on the trunk road, to replace an old wooden bridge, which was unsafe for traffic. Part of the old bridge was built on piles and part on piers, all of which were in a dilapidated condition. The new bridge is constructed through its entire length, 375 ft. from shore to shore, of rock taken from the east bank of the river. About the centre of the stream a 30 ft. opening was left, sufficient to allow the volume of the stream to pass. On either side of this opening there is a crib built of white pine and filled with rock. The balance of the bridge is comprised of a rock fill, varying in depth

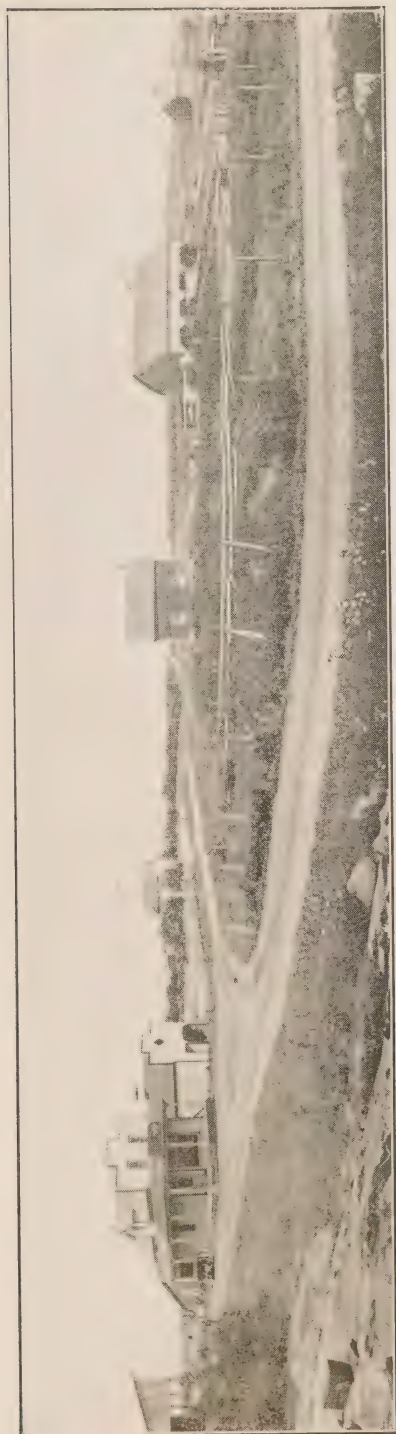


A section of the Sault to Sudbury Trunk Road, through the Garden River Indian Reserve.
Water bound macadam.

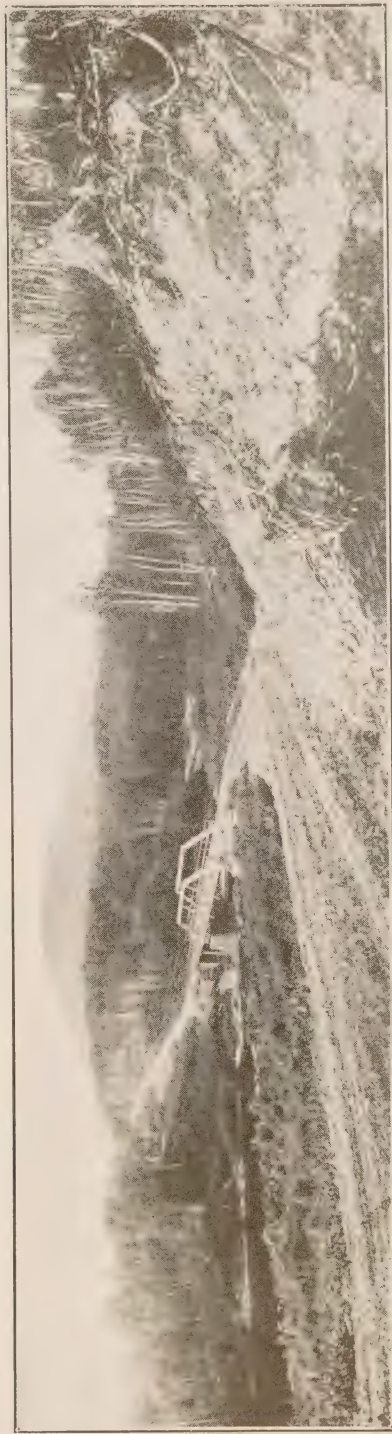
from 8 to 20 ft. as the bed of the stream in places was composed of a soft muskeg bottom. It was floored with heavy round timber 40 ft. in length on to which the rock fill was built, or dumped. The approaches to the bridge were well graded with broken rock; 4,200 cu. yds. of rock was used in this bridge.

About 4 miles west of the Blind River bridge 2,236 cu. yds. of gravel was hauled from a pit south of the Mississauga River, and placed on about 4 miles of the trunk road, which had for some time been badly in need of repair. There is still about $1\frac{1}{2}$ miles of this road which requires gravelling, which could not be finished last winter before the ice broke up in the river over which the gravel had to be drawn.

During the months of June and July repairs were made to the trunk road between Sault Ste. Marie and Echo Bay, a distance of 15 miles. About a mile of this road was covered with rocmac and the balance macadamized three years ago.



Trunk Road, Village of Devlin, Rainy River District.



Pine River Crossing, International Highway, Port Arthur and Fort William to Duluth.

Owing to the heavy traffic, the surface had become rutted in places and required re-pairing. This was done by spreading crushed rock over the surface.

East of Echo Bay, owing to the unexpected rise in the waters of the bay, it was necessary to raise the roadbed nearly one foot; 200 cu. yds. of gravel and rock was required.

Three miles of road west of Bruce Mines was re-surfaced with gravel and parts as far west as Echo Bay were repaired. This consisted of general repair work, re-grading, dragging and surfacing with gravel, where found necessary, and opening up ditches, for a distance of 18 miles. One mile of this macadamized road was covered with Tarvia B, with a view to testing the cost of maintenance of such a road.

Between Sault Ste. Marie and Algoma Mills there is 102 miles of trunk road, most of which has been surfaced with gravel or stone, and is now in fair condition throughout for automobile traffic. Constant attention will be required to keep such a road in repairs.

Goulais Bay Road:

The Goulais Bay road, running north from the Town of Sault Ste. Marie to Goulais River and Bay, was graded and improved this season for a distance of about $3\frac{1}{2}$ miles. This work was commenced in 1916 but not finished. The road, although constructed several years ago, was in such a condition, owing to bad grades, that it was of very little use to the farmers residing in the valley of the Goulais River and at Batchawaung Bay. Three of the worst grades were improved by diversions; the road was widened, ditched, re-graded and gravelled, and is now in fairly good condition, sufficient to meet the requirements of the settlers.

ROADS ON ST. JOSEPH ISLAND.

Number of miles of road repaired, ditched and graded	10
Number of miles of road surfaced with gravel	5½
Number of corrugated iron culverts placed	20
Number of concrete culverts built	3
One small concrete bridge built.	
One cedar bridge built.	
One mile off-take drain constructed.	

In June, 1917, under your instructions, I proceeded to St. Joseph Island and made a careful examination of the main roads thereon, with a view to laying out trunk roads or improving old roads, as would best meet the needs of the settlers and assist in the further development of the sparsely settled parts of the Island. The Island has an extreme length from north to south of 18 miles, a width from east to west of 12 miles, comprising an area of 90,000 acres. The population is approximately 2,500, chiefly engaged in agricultural pursuits. About one-half of the Island is in a fair state of cultivation; the soil varies in places from a clay loam to a light sandy loam, well adapted for agricultural purposes, especially dairying and fruit growing. There are large areas with shallow sandy soil, only suitable for pasture. Judging from the many fine orchards met with, the Island is well adapted for fruit growing; there is on the Island one very fine nursery. Large herds of fine cattle are to be seen everywhere on the farms; dairying is one of the chief industries. The villages of Richard's Landing and Hilton, the former on the north shore and



A nursery on St. Joseph's Island.



An apple orchard on St. Joseph's Island.

the latter on the east, are the two most important places on the Island. At these points all the larger vessels plying along the north shore visit, and from these two points most of the farm produce grown on the Island is shipped. At these villages the settlers purchase their supplies. Wharves are to be found at different points around the shore where small saw mills operated years ago. These wharves are used by the settlers or by the tourists located on the many beautiful points along the shore.

On the Island there is approximately 100 miles of old roads cut out, a fair portion of which have been graded or partly graded, and in some instances the roads have been well drained and surfaced with gravel. The Municipal Councils and the settlers in general appear to be taking a very great interest in their roads, more so than in other sections in Northern Ontario, and are anxious to assist in every way possible in maintaining them. What they request is some assistance in the construction of a trunk road across the Island in both directions, connecting the most thickly settled portions of the Island with the two main shipping points—Richard's Landing and Hilton. After a careful examination of the Island, travelling over all the leading roads in company with members of the different Municipal Councils and others familiar with the local conditions, I found that the best interests of the community would be served if the following roads were re-graded, properly drained and surfaced or re-surfaced with gravel, which is to be found in abundance in many places with a reasonable length of haul. These proposed trunk roads pass through the most thickly settled portions of the Island and also through the best agricultural lands and along existing roads with fairly good grades and few engineering difficulties to encounter. Tributary to these proposed trunk roads branch roads can be built to all sections of the Island, or existing roads can be repaired by the different Municipal Councils as necessity demands and means will permit.

Roads selected: Commencing at Richard's Landing, thence south on side-road 10 and 11, 7 miles, to Carterton Post Office on the O and P concession road, thence west $1\frac{1}{2}$ miles on the O and P line to the 5th and 6th side-road, thence south on the 5th and 6th side-road to Sterling Bay, 8 miles, thence returning to the O and P Concession west to the A line side-road, $1\frac{1}{4}$ miles, thence south and north on the A line concession, $2\frac{1}{2}$ miles and $5\frac{1}{2}$ miles, respectively, to the B and C concession road leading to Richard's Landing, and east along the latter $2\frac{1}{2}$ miles to Richard's Landing.

The above main trunk roads to be connected with the Village of Hilton by improving either the present road to Hilton on the L and M concession line, or on the O and P line, the distance being about 6 miles. There are no engineering difficulties on either of them.

Work commenced about the middle of June on the 10th and 11th side-road; also on the A line and on the road running west from Richard's Landing to the A line. The work consisted of clearing out and straightening the old roads where necessary, re-ditching, grading and surfacing with gravel; also improving the grades on the worst hills and putting in culverts and small bridges. About 10 miles of road was graded— $5\frac{1}{2}$ miles of this was well surfaced with gravel, 20 corrugated iron culverts were placed, and 3 concrete culverts and one small concrete bridge constructed, also one cedar bridge; off-take drains were constructed where necessary, and the Two-Tree Creek was cleaned out for a distance of $\frac{3}{4}$ of a mile to prevent flooding of roads. This work was performed at a cost of \$12,139.17.

ROADS ON MANITOULIN ISLAND.

- Number of miles of road graded and surfaced with gravel, 7.
1 stone bridge, 48 feet long constructed.
1 wooden bridge, 30 feet long constructed.
17 corrugated iron culverts placed.
2 stone culverts constructed.
4 wooden culverts constructed.



A view on the Trunk Road west of Kagawong, from Little Current to Gore Bay, Manitoulin Island.

Work on the Manitoulin Island, as commenced in the season of 1916, was continued throughout the summer of 1917. Work began early in June; it consisted of grading and re-surfacing with gravel about 3 miles of road beginning at Kagawong on the road between Little Current and Gore Bay to Ice Lake.

The road from West Bay south to Mindemoya was completed; 3 miles was graded and surfaced with gravel, 13 corrugated iron culverts were placed, one stone bridge, 48 ft. long, and one wooden bridge 30 ft. long, was constructed.



Mount McKay, approximately 1,200 feet high. On International Highway, Port Arthur and Fort William to Duluth.

On the trunk road between Honora and Little Current $11\frac{1}{4}$ miles was graded and surfaced with gravel.

These roads were well ditched and graded, and the finest quality of gravel placed thereon. It will take another season to complete the trunk road between Little Current and Gore Bay, a distance of 40 miles. At present the road throughout is in fairly good condition, except in a few places where it requires re-surfacing and ditching.

On the above work there was \$8,203 expended; good value was received for the amount expended. The men employed were all settlers living on the Island. An attempt was made to repair the worst parts of the Little Current and Manitouaning Road, but owing to the difficulty in getting labour this work was postponed. This is the second most important trunk road on the Island. It gives to the settlers in the south-eastern part of the Island an outlet to the railway station at Little Current, and passes through sections of the country thickly settled and well cultivated. Ten thousand dollars expended on this road in grading, surfacing and repairing small bridges would put it in good condition.

ROADS IN THE DISTRICTS OF PORT ARTHUR AND FORT WILLIAM.

Number of miles of road surfaced with gravel and shale	26
Number of miles of road repaired, re-graded, graded, ditched and cut out..	46
of which 6 miles is new road.	

Work was commenced in these districts about the middle of June and was continued up to the end of October; rainy weather and scarcity of labour retarded the work considerably. The heaviest part of the work was done on the International Highway, or what is locally known as the Port Arthur, Fort William and Duluth Highway, as far as Pigeon River. The southern 30 miles of this road was re-graded in places or gone over with road drag or small grader, and 22 miles of the road was re-surfaced with gravel or shale rock. The northern approach to the International Bridge at Pigeon River was completed; the approach is 75 ft. in length and 23 ft. wide. Fourteen thousand cubic yards of gravel and shale was placed thereon; 26 miles of the road was gone over with road drag and 4 miles re-graded. This road was opened for automobile traffic on the 18th of August. There is now fairly good communication between Port Arthur, Fort William and Duluth. The distance from Fort William is slightly over 44 miles, and Pigeon River to Duluth approximately 157 miles.

Township of Oliver:

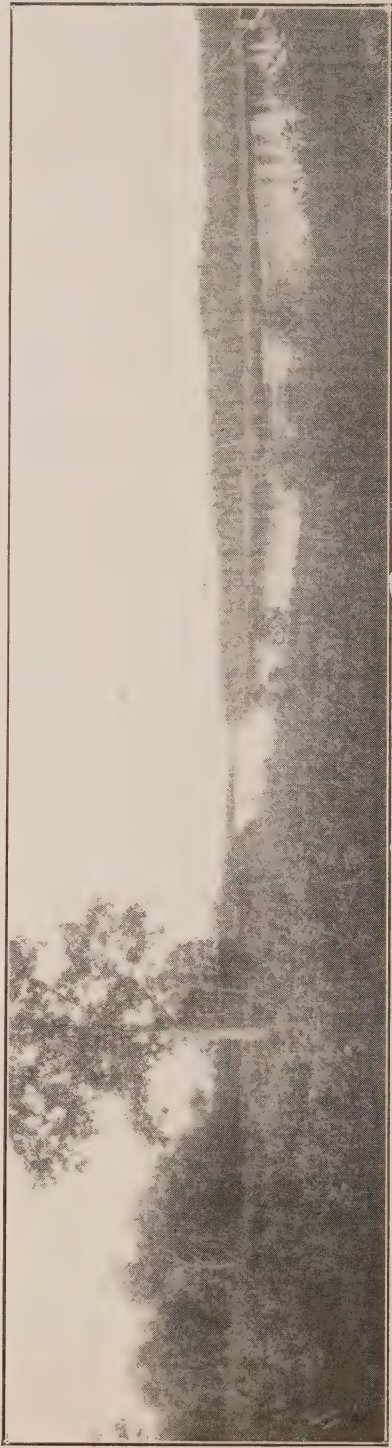
Repair work, including re-grading and gravelling in places, was performed on the Oliver Road, Lots 10 to 17, $21\frac{1}{2}$ miles.

Township of Lybster and Gillies:

Silver Mountain Road; $41\frac{1}{2}$ miles was re-graded in the Townships of Lybster and Gillies.



A view on the International Highway, on the International Boundary, Pigeon River Cascade.



A view in the valley of the Rainy River, along the International Boundary.

Township of Gorham:

Cut out and graded road between Lots 6 and 7, across Concessions 2, 3 and part of 4; $2\frac{1}{4}$ miles.

Township of O'Connor:

Cut out and graded road across Lots 4, 5 and 6, Concession 1; $1\frac{1}{2}$ miles.
Ditched and graded road between Lots 6 and 7, across Concessions 5, 6 and 7; $2\frac{3}{4}$ miles.

Township of Ware:

Cut out and partially graded road across Concession 3, Lots 9, 10, 11 and 12; 2 miles.

Arthur Street, Township of Paipoonge:

Re-graded and gravelled road across Lots 25 to 30, $2\frac{1}{2}$ miles, and cut out, graded and surfaced with gravel in places, new road across Lots 31, 32 and 33, Concession 1; $1\frac{1}{4}$ miles.

ROADS IN KENORA DISTRICT.

Number of miles of road partly cut out, ditched and graded	14½
of which $4\frac{1}{2}$ miles was surfaced with gravel.	
Number of iron culverts placed	18
Number of stone and wooden culverts built	19
Number of bridges repaired	2

Work in this district was commenced early in June in constructing and repairing roads in the Township of Pellatt, north of Keewatin: $3\frac{1}{4}$ miles of new road was constructed and 2 bridges repaired. These roads are cut out, graded and half a mile surfaced with gravel.

The balance of the work was performed in the agricultural sections east and west of Dryden on the Canadian Pacific Railway. In this section of the country, extending from Vermilion Station east to Dymont Station, a distance of 56 miles along the Canadian Pacific Railway, there is to be found good sections of agricultural land, broken in places. The soil varies from a light coloured clay land to clay loam and sandy loam. The best section is located along the railway in the vicinity of Dryden Station and extending west to Eagle River, a distance of 1½ miles, and east of Wabigoon 13 miles. In this section there are fairly large areas of good agricultural land, part of which has been settled on for nearly twenty years. Many of the settlers have made good progress. A good proportion of the country was burnt and re-burnt over many years ago and is now grown up with a small second growth timber, jack pine, poplar, birch and spruce. The land, in many places, is easily cleared.

Good colonization roads have been built in several of the townships and along the railway between the different stations. Very few miles of gravel roads have as yet been built and as the soil is chiefly clay, the roads, during the wet seasons of the year, become badly rutted and unfit for traffic. It is difficult to procure gravel

in places. I found that the main travelled road a few miles east of Dryden was partly constructed and in some places was only a mere trail or winter road. After careful examination of different roads constructed, and consultation with the settlers, I found that the best interests of the agricultural sections in that district would be served by constructing a fairly good gravel road along the concession lines paralleling or as near to the railway as possible, or adjacent to the right-of-way where practicable, following, as far as possible, existing roads. A careful survey and exploration was made from Dymont to Oxdrift, and the old roads and trails were straightened out and diversions made where required to avoid bad grades. Work was commenced at Dryden and the road cut out where required, well ditched and graded as far east as Ellen Bay, a distance of nearly 10 miles; \pm miles of the worst part of this road was surfaced with gravel. It will be necessary, however, to re-surface the balance of this road as soon as conditions will permit as the soil is nearly all a heavy clay or clay loam.

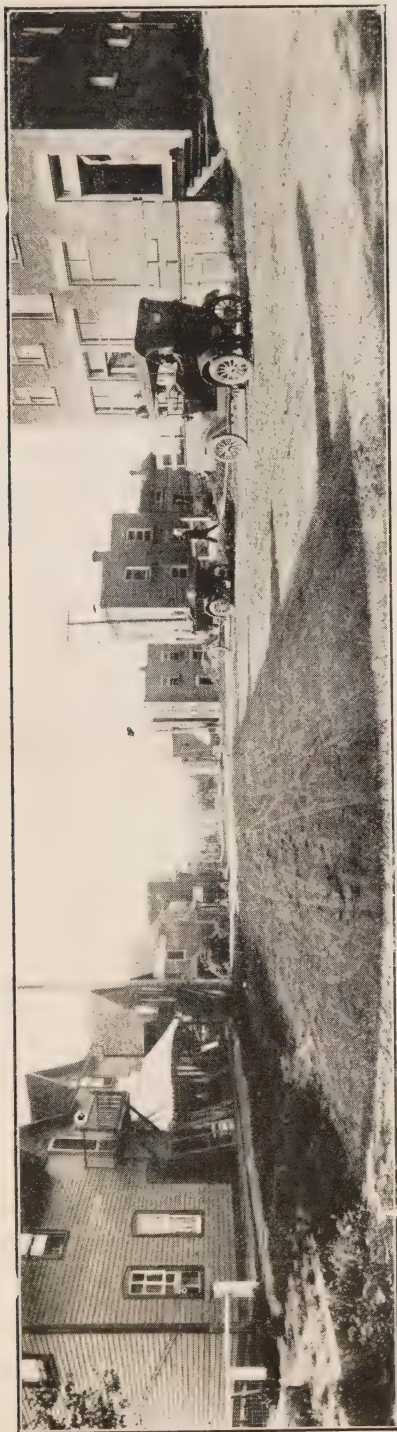
A short road was constructed west of Dryden along the line between Concessions 5 and 6 about 2 miles, and graded, to give to a small settlement an outlet to the railway.

From the proposed trunk road along the railway several good colonization roads have been opened up into the agricultural townships to the north, and when the main trunk road is completed, connecting these roads with the railway stations, it will be of very great service to the different scattered settlements north to the Grand Trunk Pacific Railway. There is a very fine tract of land in this section of the district, a large percentage of which is not yet under cultivation, partly owing to the lack of more good roads and schools. The construction of a fairly good trunk road along the Canadian Pacific Railway, from station to station, will greatly relieve the situation. The character of the country is such as to warrant a reasonable expenditure on trunk roads in this particular section. The settlers as yet are comparatively poor and cannot do very much in the way of assistance, further than in the maintenance of the road. This section excels in the production of clover and timothy seed; the settlers find a ready market for their produce at the pulp and paper mills at Dryden.

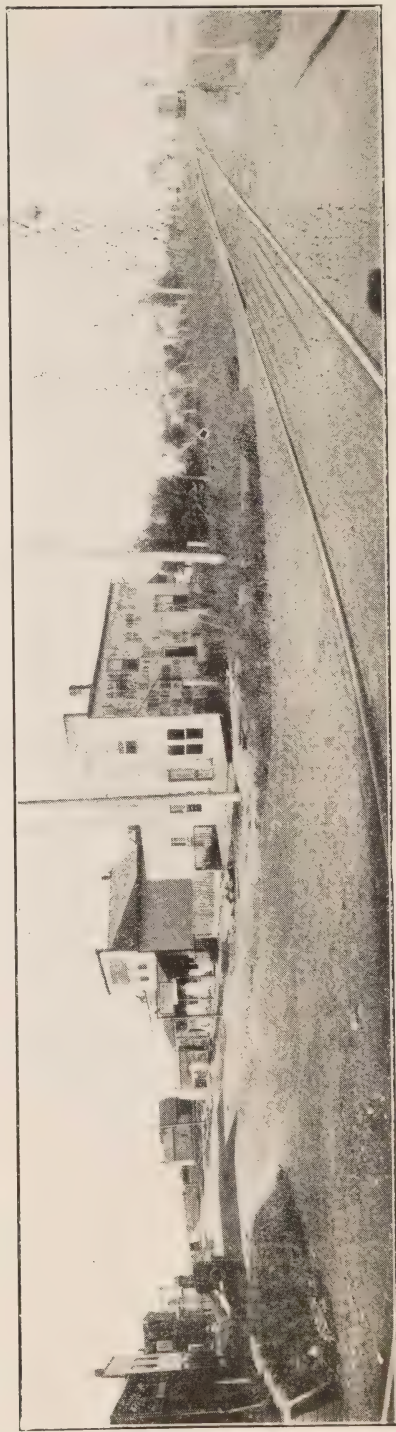
ROADS IN THE DISTRICT OF RAINY RIVER.

Number of miles of new roads cut out only	23
Number of miles of new roads cut out, grubbed and graded	23
Number of miles of old roads regraded and repaired	14
Number of miles of old roads resurfaced with gravel	18.6
Number of culverts constructed	27
Number of bridges constructed	3
Number of feet of tap drains constructed	4,217

During the winter of 1917, beginning about the middle of January, several small contracts were let for the surfacing of parts of trunk roads where gravel could be easily procured and hauled more cheaply than during the summer season. As soon as the season opened up in May the main trunk roads were run over with road drags or small graders where they had become rutted late in the fall of the previous season. When the settlers had finished their seeding, small contracts were given to settlers throughout the district for the cutting and clearing of roads in the section between Fort Frances and the Lake of the Woods; these contracts numbered about thirty. A few road camps were started about the beginning of June and were



The village of Powassan, on the North Bay and Huntsville Trunk Road.



A view of the village of Stratton, on the Fort Frances and Rainy River Trunk Road and Canadian Northern Railway.

continued throughout the season. The main work consisted in the building of roads running north and south from the main trunk road between Fort Frances and the mouth of Rainy River, and the re-gravelling of parts of trunk roads. This was found necessary owing to the increase of traffic of former years. The main trunk road is now joined up by way of Beaudette, where the Canadian Northern Railway crosses Rainy River into Minnesota. There is a ferry across the river connecting the roads in Ontario with the State roads in Minnesota, which State roads extend westward and connect with the main trunk road running south from Winnipeg. It is now possible to reach Winnipeg by automobile from Fort Frances, and also reach several of the larger towns in the northern part of Minnesota. The extra amount of traffic caused by the opening up of these roads has necessitated the building of a better class of trunk roads throughout the Rainy River Valley. Tourists from the central part of Minnesota cross the International Boundary at Fort Frances and travel westward along the Fort Frances and Rainy River trunk road, re-crossing the river at Beaudette by ferry into Minnesota and proceed west and north to Winnipeg. The branch trunk roads running north and south from the main trunk road constructed during the last five years have been gravelled, and have opened up large sections of the best agricultural land in the valley.

Two creameries, one cheese factory, and one grist mill were opened up this season at Devlin, Lavallee and Emo, and notwithstanding the scarcity of farm labour throughout the district good progress is being made in clearing up new sections of land. A good class of settlers have come into the district within the last few years; in travelling through the district there is seen every indication of satisfactory progress and prosperity. There are still required, however, new roads to meet the wants of new settlements in the townships distant from the railroad and from Rainy River, townships where settlers have been located for several years with roads only passable during the dry seasons of the year. It will take at least two or three seasons yet to construct sufficient roads to meet the necessary requirements of the new settlers now located. There are few sections in the newer parts of Ontario where there is a better future, from an agricultural standpoint, than in the Rainy River Valley. The settlers find a ready market for their farm produce in the lumber camps and at the pulp and paper mills at Fort Frances, and logging camps on the shores of Rainy Lake.

Hereafter is a summary of the work performed this season:

Township of Atwood:

Re-graded trunk road across river lots 17 to 25; $1\frac{1}{2}$ mile.

Township of Curran:

Gravelled road east of Secs. 4 and 9; 2 miles.

Township of Blue:

Road cleared, grubbed and single ditch west of Secs. 6, 7 and 18; 3 miles.
Road cleared, grubbed and single ditch north of Secs. 7 and 8; 1 mile, 1,150 ft.
This road gives an outlet to settlers who have been in that part for years without a summer road, and also drains the land adjoining.

Township of McCrossen:

Cleared road allowance between Concessions 3 and 4, across Lots 1 and 2; 1 mile. Cleared road between Lots 2 and 3; $\frac{1}{2}$ mile. Re-graded road between Lots 2 and 3, across Concessions 1 and 2; 2 miles. Cleared road across Concessions 6, 5 and 4, east of Lot 1; 3 miles. The above road when completed will give an outlet to a large number of settlers.



A view on the Fort Frances Trunk Road through the
Manitou Indian Reserve.

Township of Morson:

Cleared road between Lots 12 and 13, across Concessions 1, 2 and 3; $2\frac{1}{2}$ miles. Cleared road south of Lot 13, Concession 1; 70 rods.

Township of Nelles:

Cleared road north of Sections 5 and 6; 2 miles. One and one-quarter miles of this road was grubbed and graded. Cleared road between Sections 7 and 8; $\frac{1}{2}$ mile north from the south-east corner of Section 7. Cleared road between Sections 16 and 17; $\frac{1}{2}$ mile.

Township of Morley:

Re-graded trunk road north of Sections 19 and 20; 2 miles.

Township of Sifton:

Road ditched, grubbed and graded between Lots 8 and 9; $\frac{1}{2}$ mile on the south half of Concession 1. Road ditched and graded between Lots 8 and 9, Concession 2; $\frac{1}{2}$ mile.

Township of Worthington:

Gravelled and re-graded trunk road across river Lots 1 to 48; 3 miles.



A view at the Long Soo Rapids on Rainy River.

Long Sault Reserve:

Cleared road allowance 33 ft. wide between Lots 30 and 31; 1 mile, 13 chains. Gravelled trunk road commencing at the west boundary of Long Sault Reserve and thence east $2\frac{5}{8}$ miles. Regraded trunk road $4\frac{1}{2}$ miles across the Long Sault Reserve.

Township of Richardson:

Cleared, grubbed and partly graded road between Lots 2 and 3, Concession 1; 1 mile. Cleared, grubbed and graded road across Lots 3 and 4, between Concessions 1 and 2; 1 mile. Road cleared and low spots ditched across Lots 5 to 10, between Concessions 1 and 2; 3 miles.

Township of Potts:

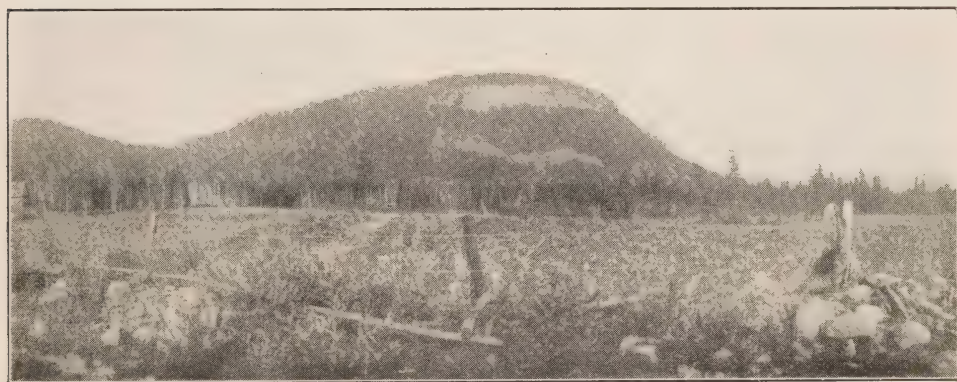
Road cleared between Lots 2 and 3, across Concessions 1, 2 and 3; 3 miles.
Road cleared between Lots 8 and 9, across Concessions 1 and 2; 2 miles. Road cleared across lot 8, between Concessions 2 and 3; $\frac{1}{2}$ mile.

Township of Mather:

Road cleared east of Lot 1, across Concessions 5 and 6; $1\frac{3}{4}$ miles.

Township of Kingsford:

Road grubbed and graded across Lot 3, between Concessions 1 and 2; $\frac{1}{2}$ mile.
Repaired road between Lots 4 and 5, Concession 2; 1 mile.



A range of mountains on the International Highway.

Township of Devlin:

Road cleared and grubbed a distance of $\frac{3}{4}$ mile and $\frac{1}{2}$ mile corduroy laid, and ditched between Sections 18 and 19. Road cleared, grubbed and ditched; $\frac{1}{3}$ mile, and 47 rods of corduroy laid west of Section 18, Devlin. Road gravelled east of Sections 2, 11 and 14; 3 miles.

Township of Lash:

Graded road between Sections 34 and 35; $\frac{3}{4}$ mile, and partly graded $\frac{1}{4}$ mile. Graded road between Sections 25 and 26; $\frac{1}{3}$ of a mile. Single ditched road between Sections 14 and 15 and laid 90 rods of corduroy; 1 mile. Single ditched and corduroyed road north of Section 15; $\frac{1}{5}$ of a mile. Gravelled trunk road north of Section 28 and south of Section 32; $\frac{2}{3}$ of a mile.

Carpenter and Dobie Townline:

Road gravelled across Concessions 4, 5 and 6; $2\frac{1}{2}$ miles.

Township of Burriss:

Re-graded and gravelled road between Lots 8 and 9, across Concessions 1, 2, 3 and 4, and jog on correction line; $4\frac{1}{4}$ miles.

Township of Crozier:

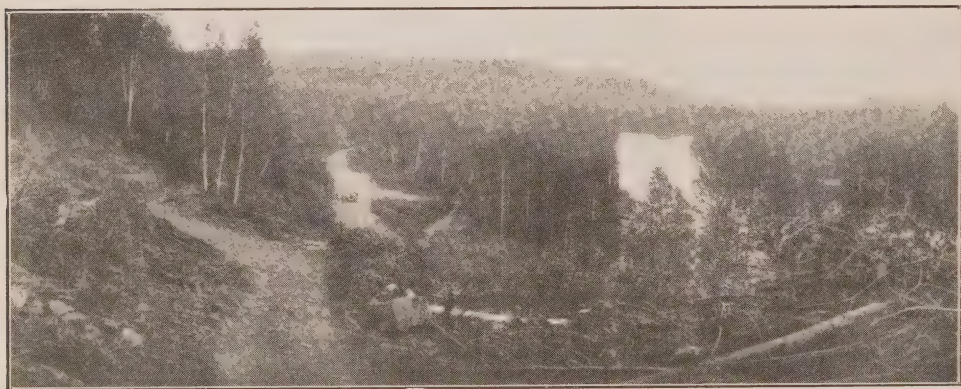
Re-graded and gravelled trunk road north of Sections 19 and 20; 1 mile. Road cleared and grubbed north of Sections 34 and 35; $1\frac{1}{2}$ miles. Three-quarters of a mile of this road was ditched.

Township of Miscampbell:

Road corduroyed and ditched between Lots 8 and 9, Concession 3; $\frac{1}{2}$ mile. Road re-graded and ditched across Lots 9 and 10, Concessions 2 and 3; 1 mile. Road grubbed, graded and ditched between Lots 10 and 11, Concession 3; 1 mile.

Township of Woodyatt:

Road gravelled between river Lots 32 and 33; $1\frac{3}{4}$ miles.



A view on the International Highway through Rose Valley along Pine River, showing the Howard range of mountains to the left, rising to a height of 1,000 feet.

Mine Centre:

Completed grading of road between Mine Centre and the Olive Mine, distance of $4\frac{1}{2}$ miles. One-half mile of this road was gravelled.

Township of Carpenter:

Graded road east of Lot 1, Concession 2; $\frac{3}{4}$ of a mile.

Wild Lands Reserve:

Road commencing at the north-east corner of Section 29, and thence along the north boundary of Sections 29, 28 and 27; $2\frac{1}{4}$ miles. This road was cleared, grubbed and graded, and $2\frac{1}{2}$ miles of ditch dug.

If this road is continued another mile it will give an outlet to the settlers in the vicinity of McGinnes Creek and also will open up a fine tract of land in the Wild Lands Reserve.

In addition to the above-mentioned work the trunk road between Rainy River and Fort Frances was kept dragged when necessary.

To the Honourable the Minister of Lands, Forests and Mines:—

SIR,—I beg to recommend that the following amounts be expended in the construction of new roads, repairing, grading and ditching of old roads, re-surfacing with stone or gravel of new and old roads, construction of bridges and culverts, and the improvement of waterways in the Districts of Rainy River, Kenora, Port Arthur and Fort William, Sault Ste. Marie, Algoma, Sudbury, Nipissing, Parry Sound, Muskoka, Manitoulin and St. Joseph Islands, during the season of 1918, as follows:

District of Rainy River:

In the Rainy River Valley in the construction of new roads in the partly settled townships in the northern part of the valley; the surfacing with gravel of trunk roads now graded, or partly re-surfaced; the construction or repairing of bridges and culverts \$50,000

District of Kenora:

Repairing of old roads north and north-west of Keewatin and Kenora; the continuation of the trunk road paralleling the Canadian Pacific Railway east and west of Dryden Station, between Dymont and Eagle River, and the repairing of existing roads between the Canadian Pacific Railway and the National Transcontinental Railway (Canadian Government Railway) north-east and north-west of Dryden, and constructing new roads on the Canadian Government Railway 35,000

District of Port Arthur:

Re-surfacing with gravel trunk and main roads; the construction of new roads, north and east of Port Arthur, and the cutting out of a winter road into the mining section around Duck Lake, north of Schreiber on the Canadian Pacific Railway 40,000

District West and South-west of Fort William:

To complete the surfacing with gravel or stone of the International Highway between Fort William and Pigeon River (en route to Duluth), and the construction of new roads and repairing of old roads in the Townships of Conmee, O'Connor, Gillies, Lybster, Strange and Pearson, and in the new agricultural sections along the International Highway 40,000

Sudbury and Sault Ste. Marie, and Copper Cliff and Creighton Trunk Roads:

Surfacing in places with stone and gravel the trunk road between Sudbury and Sault Ste. Marie; the construction of new roads in the agricultural sections west of Espanola, north of Thessalon, and repairs to old roads; surfacing a trunk road from Copper Cliff to Creighton Mine 45,000

Manitoulin Island:

To complete the grading and gravelling of the trunk road between Little Current and Gore Bay, and to grade and gravel a trunk road between Little Current and Manitouaning 15,000

St. Joseph Island:

To grade and surface with gravel trunk roads laid out on St. Joseph Island	15,000
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Districts of Sudbury and Nipissing:

To construct new roads in the agricultural sections north and south of the Canadian Pacific Railway between Sturgeon Falls and Sudbury; repairing trunk roads north of Sudbury into the Blezard Valley; improving road and water route into the West Shining Tree Mining Section; re-surfacing of parts of the Sudbury and North Bay trunk road, between North Bay and Markstay	60,000
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Districts of Nipissing, Parry Sound and Muskoka:

The extension from Sundridge south of the North Bay, Sundridge and Huntsville Trunk Road; the completion of the Chisholm Trunk Road, and the repairing of the trunk road from North Bay to Sundridge	40,000
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District of Nipissing:

Construction of trunk road north of North Bay through the Township of Widdifield, and improving and re-surfacing trunk road from North Bay east to Mattawa and east of Mattawa	10,000
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Unforeseen work, surveys of new roads, renewing and repairing of bridges and culverts, re-surfacing and improving old roads, and the construction of short roads in sections where new settlement is taking place	30,000
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Office and engineering expenses, equipment and new plant	20,000
	<hr/>
	\$400,000

J. F. WHITSON,
Commissioner.

To the Honourable, the Minister of Lands, Forests and Mines, Ontario:

SIR,—For the season of 1918, under the supervision of the Northern and North-western Ontario Development Acts of 1912 and 1915, I recommend for the construction, repair and maintenance of roads, bridges and culverts, the following expenditures:

For the District of Temiskaming and Northern Part of Algoma:

Along Temiskaming and Northern Ontario Railway:

From Cochrane to Porquis Junction	\$35,000
From Porquis Junction to Boston Creek	35,000
From Boston Creek to Earlton Junction, including the townships served by the Elk Lake and Charlton branches of the T. & N. O. Railway	50,000

Along Transcontinental Railway:

Along this railway from the Quebec boundary to the Town of Hearst at the junction of the Transcontinental Railway with the Algoma Central Railway, including roads for the returned soldiers' and sailors' settlement in O'Brien Township	50,000
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Porcupine Mining District:

For the improvement of roads in this area and for the building of further roads in the Township of Mountjoy	20,000
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<i>Unforeseen Expenditures and Contingencies</i>	10,000
	<hr/>
	\$200,000

All of which is respectfully submitted.

I have the honour to be, Sir,

Your obedient servant,

C. H. FULLERTON,

*Acting Director, Northern Development
Branch, Temiskaming District.*

Toronto, October 31st, 1917.

AGRICULTURAL WORK CARRIED ON IN CO-OPERATION WITH THE DEPARTMENT OF AGRICULTURE.

ONTARIO GOVERNMENT CREAMERY, NEW LISKEARD, ONT.

The Ontario Government Demonstration Creamery, erected in the Town of New Liskeard during the summer of 1917, is an ideal of perfection and completeness in every detail. The Government spared no effort to make the structure permanent with a view of establishing a manufacturing centre for the manufacture of creamery butter of the best possible quality.

~~New Liskeard was chosen as the location on account of railroad and market facilities.~~ A site was bought near the station and work commenced, and in August the plant was put in operation under the direction of A. MacLachlan, a graduate

butter-maker of the Ontario Agricultural College, and a man of wide experience in the business. Owing to the fact that it was somewhat late in the season when the plant was put in operation, not so many farmers patronized it as would have had work commenced early in the spring. However, results were better than expected and those in charge were well satisfied. The creamery is to be in operation all winter (this was not expected) which goes to prove that the farmers are falling in line and are well satisfied with results. Inquiry among the farmers sending cream to the creamery, as to what their opinion is regarding the scheme is usually answered thus: "I am exceptionally well pleased with results." "I believe in the creamery to this extent that I am going to add as many more cows to my herd as I can." "My wife never wishes to make butter again." "My cows are making me more money than when we churned the cream at home."

With the spring flow of milk the quantity of cream will increase greatly. Then there are many new patrons preparing to send cream and as the manager's slogan is "Once a patron, always a satisfied patron," there is little chance of many, if any, farmers quitting.

The following figures shows business to November 30th:

Operations were started on August 18th, and up to the 31st we took in 7,016 pounds of cream, producing 1,852 pounds of fat, making 2,342 pounds of butter for which we received \$989.29, and paid patrons for cream \$830.10 at the rate of 45c. per pound fat.

From September 1st to September 30th we took in 12,570 pounds of cream, producing 3,520 pounds of fat, making 4,354 pounds of butter for which we received \$1,867.70, and paid patrons for cream \$1,669.00 at the rate of 48c. per pound fat.

From October 1st to October 31st we took in 11,327 pounds of cream, producing 3,187 pounds of fat, making 3,890 pounds of butter for which we received \$1,728.59, and paid patrons for cream \$1,567.54, at the rate of 49c. per pound fat for first half and 50c. per pound for last half.

From November 1st to November 30th we took in 6,172 pounds of cream, producing 1,660 pounds of fat, making 1,884 pounds of butter for which we received \$902.41, and paid patrons for cream \$836.95, at the rate of 50c. per pound fat.

Making total for three and one-half months of:

Thirty-seven thousand and eighty-five pounds of cream, 10,219 pounds of fat, 12,470 pounds of butter, \$5,487.99 cash received for butter, \$4,903.59 paid out to patrons; an average price per pound fat, 47.98; number of patrons sending cream, 65. This number will be more than doubled for 1918, and almost every person who patronized the creamery the past season is increasing his herd, and some have already doubled them.

At the present time we are taking in 1,500 pounds of cream per week, making about 500 pounds of butter.

In conclusion I beg to state that the putting of a creamery in operation in the Town of New Liskeard for the benefit of the farmers of the lower end of the district is materially, in a financial way, helping—by providing an outlet for all the cream they are prepared to produce. It is now up to the farmer. There can be no doubt about the future of the business; good and ample market is already in the district for all the butter that can be produced.

SALE AND DISTRIBUTION OF COWS THROUGH TIMISKAMING DISTRICT, 1917.

During the early spring of 1917, at the time when the Government decided to erect a creamery in New Liskeard, the Government was approached by a number of farmers interested in stock (milch cows) and who desired to purchase good grade cows, to ascertain the chances of having a few carloads bought and sold in the district. The Government decided to comply with the request and bought three carloads of grade cows, milkers, springers, etc. These were shipped to New Liskeard and sold by public auction (to farmers only) on April 13th. Farmers came from as far north as Cochrane to attend the sale. Forty-three head were sold and, as the buyers were located all along the line of the Timiskaming and Northern Ontario Railway, the Government decided to ship freight prepaid to the buyer's nearest station.

The interest taken in the sale induced the Government to carry on, and in the early summer nineteen more head of milch cows were shipped to New Liskeard and eighteen head to Monteith. These were advertised for sale at cost price, the farmers paying transportation from place of buying to their own farms.

Despite the fact that all good milch cows are very high in price and hard to buy, the Government was able to pick up a good average lot of cows of grade Ayrshire and Shorthorn type.

The auction sale of April 13th gave very creditable results, the cows selling for a price sufficiently high to cover purchase price and transportation. The private sale of those shipped in later worked out just as well as expected; buying was naturally more deliberate and extended over a few months' time. All cows were sold for cash at time of sale, the reason for so doing being that the new Government Loan Scheme, whereby a farmer of good standing may borrow up to \$500.00 from the Government for the purpose of buying stock and otherwise improving his farm made it possible for needy farmers to get the necessary cash to buy stock with.

In addition to buying cows, the Government also bought a few carloads of horses and shipped them to New Liskeard and Monteith to be sold to settlers at cost. The demand for horses did not prove as great as expected, so that only the one lot was sent in. The purchase of good stock, to be sold to the settlers at cost, is a very creditable line of work and one to be followed up.

In the districts west of the Great Lakes the farmers are taking a much greater interest in live stock. This increased interest is largely due to the development of dairying and their appreciation of the importance of live stock in keeping up the fertility of their farms. In these districts the Government sold at auction for cash forty-three cows at Port Arthur, seventeen at Kenora, eighteen at Dryden and forty-three at Devlin.

In Muskoka and Parry Sound Districts sheep raising is becoming a very important industry, but the farmers are seriously handicapped by the fact that there are very few breeders of pure-bred stock. Realizing the difficulty the Government purchased thirty pure-bred rams and sold them at cost to the farmers.

The results of efforts on the part of the Government in assisting the farmers along live stock lines have been very encouraging indeed. It has enabled farmers to get good stock at reasonable prices and will undoubtedly have a very desirable influence upon the building up of the live stock industry of Northern Ontario.

THE ESTABLISHMENT OF NEW LISKEARD DEMONSTRATION FARM.

In the fall of 1916 the Government, under Hon. G. Howard Ferguson, Minister of Lands, Forests and Mines, decided to establish a Demonstration Farm at New Liskeard. The Town of New Liskeard donated 70 acres of land, 30 of which is cleared. In addition, the Government bought 160 acres of wooded and slashed land, making a total of 230 acres of unbroken, tillable land. All but 80 acres is within the town limits and ideally located for farmers visiting the town either by train or vehicle. The soil varies from sandy loam to clay and is quite characteristic of the average soil of the New Liskeard farming community and north to Englehart.

The farm is to be strictly a demonstration farm for the purpose of testing out the different kinds of field and root crops most suitable to the district. It is also the aim of those in charge to produce seed of first-class quality for sale to farmers throughout the district. These lines of work, properly carried on, cannot help but stimulate and benefit New Ontario agriculture, because of the fact that conditions are different to those of the older part of the Province where we have a more permanent agriculture. Somewhat short seasons demand close attention to soil cultivation, seed, varieties and methods of seeding. These are things the Government plan to take up on this new farm.

It was too late in the fall of 1916, when the farm was taken over, to do any work on the cleared part of the farm. Work was commenced in the spring, but it was found that, on account of the land having been a commons for years, it was infested with all kinds of weeds and would need to be summer-fallowed, at least it was considered advisable to do so.

One acre was given over to the pupils of the Continuation School for garden work. This they planted to potatoes, doing all work under the direction of the local office of the Department of Agriculture.

A part of the land summer-fallowed was put in shape for fall wheat and a small acreage sown to Dawson Golden Chaff the last week in August. It showed up very well in the fall and should winter through all right.

Plans of up-to-date farm buildings are being prepared, and will be erected at an early date. At least twenty-five head of high-class pure-bred dairy cattle will be kept and other kinds of pure-bred stock as well. Good young stock will be reared for sale to farmers throughout the district. Owing to the fact that time has not permitted the erection of proper farm buildings, stock on hand consists only of one team of Clydesdales, and one pure-bred imported Yorkshire boar held for service.

In addition to the farm buildings the Government propose to erect an up-to-date Agricultural High School and already a very commodious Judging Pavilion and Assembly Hall has been erected and is now in course of completion. This building will be used for short course work in the judging of all kinds of live stock and seed. Courses embracing every feature of farm and domestic science work will be taught and demonstrated in the school and hall. All this bespeaks a new and greater interest in New Ontario agriculture, the benefit of which will only show in the years to come.

It is the intention of the Government to put the farm in full operation as soon as possible and make it a producing institution. Considerable attention will be given to the best varieties of potatoes to plant and the most suitable methods of planting with a view to carrying out the Government's scheme to make New Ontario a seed producing country.

Many important lines of work are to be carried out relative to helping perfect Timiskaming agriculture.

MATHESON DEMONSTRATION FARM.

Immediately south and across the T. & N. O. from the town the Government has reserved a lot for farm demonstration purposes. In the fall of 1916 thirty-five acres were plowed and made ready for spring cropping. It was decided to seed all but three acres to O.A.C. No. 3 oats, a variety especially well adapted to conditions in the district. Results were most encouraging, considering the very unfavourable spring season which delayed seeding from two to three weeks as compared with the three previous years. In 1914-15-16 seeding commenced on the 5th of May, but in 1917 it was the 21st before it was possible to commence seeding operations and, although the weather following was not very favourable, the grain came along well. It ripened in approximately ninety days from date of seeding and was not at all affected by the early fall frosts of Aug. 20th and Sept. 6th. There was a yield of fifty-five bushels per acre of well matured, plump, bright grain. After threshing the grain it was shipped to the Government farm at Monteith, where it will be thoroughly cleaned and made ready for distribution to settlers at a nominal price per bushel.

The entire farm was seeded down to clover, a part of which is to be left for seed and hay growing purposes. The seeding of clover with all grain is a practice the Government makes for the purpose of adding fertilizer to the soil and increasing the humus content. About one-third of the farm was fall plowed for next spring's crop, the balance being left in hay.

Three acres were planted to potatoes but results were not very satisfactory on account of the bad season. Nowhere in the district did potatoes do well last summer as compared with previous years. Lack of sunshine, cold, damp weather being the cause, coupled with the fact that seeding was unusually late.

At Matheson, as elsewhere along the Timiskaming and Northern Ontario Railway, the Government plans to demonstrate what can be done in the production of field crops by using varieties that are suitable to climatic conditions.

COCHRANE DEMONSTRATION PLOT.

In the fall of 1917 some ten acres of slashed, unstumped land were taken over by the Government. The plot is a part of the agricultural grounds lying north and west of the town. It is the intention of the Government to proceed with the clearing and fencing of this plot of ground in the spring of 1918. Small demonstration plots of the different kinds of staple grains and root crops will be planted from year to year by way of proving the possibilities of the country from an agricultural standpoint.

SOLDIERS' AND SAILORS' TRAINING SCHOOL, MONTEITH.

The Land Settlement Scheme for the placing of returned soldiers and sailors on the land was put in operation in the spring of 1917. The establishment of a training school on the Government Demonstration Farm, Monteith, was decided upon, and, in order to provide immediate accommodation, temporary quarters were erected in the spring. The building was made to house thirty men. The dormitory, arranged hospital fashion, was equipped with single beds, mattresses, sheets, blankets, pillows, etc. A large living-room, adjoining the sleeping quarters, provided a place of recreation. In this was placed a billiard table, piano and gramophone, for the use and pleasure of the men. Kitchen, dining-room, storehouse,

baggage-room and laundry were built to fully provide for the comfort of those in training.

On June 14th the first lot of men arrived, twenty-seven in all. Some of them were men with farm experience, while others had never worked a day on a farm. In view of this fact we were not surprised to find that, as time passed by, some of them decided that it would not be in their own best interests to carry on with the scheme. Any man deciding to quit was provided with free transportation back to his home. On the whole, the majority of the men showed an interest in the work and were willing to do their best. Certain conditions, peculiar to pioneer life, at times caused some of the men to wonder as to the advisability of staying with the scheme, but, as they became more accustomed to the work and more interested, these difficulties did not appear so formidable.

The men are required to do all kinds of farm work and are entitled to receive lectures of a practical nature on the most important farm subjects. Practical foremen are placed over the men to instruct them in the best methods of land clearing, bush work, care of stock, etc. While in training the men are paid a wage equal to current wages.

By way of making permanent provision to look after the agricultural welfare of those desiring to take advantage of the scheme, a large and thoroughly up-to-date building is being erected. This building will have accommodation for sixty men and is provided with all modern conveniences. No effort is being spared on the part of the Government to make things as comfortable as possible for the men. A rather extensive scheme is being planned whereby this new school may be used in future years as a place of instruction and education, where the holding of short courses in agriculture and domestic science, for the benefit of Temiskaming settlers, will take place.

During the past summer sixty men passed through the regular course of training. Of these, thirteen decided to give up the scheme, as they considered it would not be in their own best interests to follow it through. The other forty-six have decided to go on to the Colony Farm at Kapuskasing, where a large tract of land is held, in 100-acre lots, for settlement. At Kapuskasing the men are settled on farms which in time become their own if they qualify and fill required regulations.

Naturally, on account of the scheme being a new thing, it will take time to work out all details so that it may be carried on in the best possible interests of the men in training. Those in charge have had to look after considerable work in connection with the improvement and building of new farm buildings. The completion of these will allow closer attention to details in the carrying out of work regarding the men in training.

While pioneer conditions still exist in the upper part of the district and settlers are required to put up with many inconveniences, the substantial way in which the Government is prepared to help all returned men desirous of taking advantage of the scheme, will entirely eliminate many hardships which the average settler has to put up with. Much, of course, depends on the men themselves as to whether they become successful in the scheme. The Government is making it possible for them to help themselves and, in so doing, have substantially provided means of looking after all important matters connected with the successful carrying out and completion of the scheme. Time alone will show results, which, because of the fact that the soil of the Clay Belt is fertile and productive, leaves little doubt but that they will be advantageous to those most vitally concerned.

C. F. BAILEY,

Assistant Deputy Minister of Agriculture.

Appendix No. 34.

REPORT OF FORESTRY BRANCH, 1917.

SIR,—The work of the Forestry Branch for the year ending 31st October, 1917, can be conveniently reported under three headings, viz., I. Forest Protection, II. Reforestation, III. Tree Diseases.

I. FOREST PROTECTION.

(1) *Legislation.*

The protection of forests from fire in 1917 was carried on under the authority of new legislation, *The Forest Fires Prevention Act*, which embodied the modern features which experience has shown to be desirable. In brief, these were the permit system in respect to the setting out of fire within a close season, power to compel the cleaning up of fire hazards, and provision for the usual safeguards in the use of engines, mill waste burners, etc. The Act provided for the appointment of a Provincial Forester for its administration.

(2) *Organization.*

The area protected was divided into thirty-four districts, each in charge of a Chief Ranger. Chief Rangers were assisted in their inspection work by one or more deputies according to the number of rangers working in their territory. Over the Chief Rangers were three territorial Inspectors, with headquarters at North Bay, Cochrane, and Nipigon; and the general field work was supervised by a Superintendent for the Province.

The number of rangers appearing on the monthly paylists was: April, 84; May, 828; June, 972; July, 1,042; August, 1,020; September, 885; October, 59. Of this total, the maximum number of rangers employed during any one month exclusively on Forest Reserves and Provincial Parks was 290; a portion of the area is under license. The cost of patrol on reserves and parks was \$88,752.25, and outside these \$277,372.84.

The increased number of men required in the new organization was due to several factors, namely, the addition of rangers on licensed lands, the introduction of the permit system and the placing of protection on areas where none had previously existed.

(3) *Patrol Area.*

An increase in the number of rangers employed was necessitated by an Order-in-Council of April 16th, 1917, imposing an annual fire protection charge of \$6.40 per square mile or fraction thereof on all timber berths or limits under license or permit, and on all pulpwood or timber concessions covered by agreements.

The total area under protection approximated 100 million acres. In addition to Crown Lands, licensed and unlicensed, protection was furnished at the request of the owners to 680,000 acres held in fee simple, the cost of which was borne entirely by them.

(4) *Fires.*

The weather in the earlier part of the fire season was dry. This was particularly the situation in the north-western area of the Province, many sections not receiving any rain till near the middle of June. In consequence, many fires occurred in this region, some of which got beyond control and burned over large areas. For the remainder of the season, on the whole, the weather was wet and the hazard low, till the second week in September when a second dry period set in, especially in the east.

Fire Summary, 1917.

1. Number of fires reported:

1,110, of which 759 had occurred before July 1st.

2. Causes:

(a) Settlers clearing land	91
(b) Neglected camp fires	154
(c) Railway operation	549
(d) Lightning	32
(e) Logging operations	46
(f) Miscellaneous (known)	40
(g) Unknown causes	198

3. Areas:

(a) Timber land, mainly coniferous (softwood)	73,160
(b) Timber land, mainly hardwood	135
(c) Cutover land, some coniferous timber left	148,408
(d) Cutover land, some hardwood timber left	2,160
(e) Young growth,* mainly coniferous	61,806
(f) Young growth,* mainly hardwood	13,202
(g) Barren	82,959
(h) Grassland	2,334
Total	384,164

4. Estimate of Timber Damaged:

(a) Feet, board measure	15,278,000
(b) Cords (mainly pulpwood)	91,246
(c) Ties	781,685

Railway Fires.—As regards the origin of fires the outstanding feature is that almost 50 per cent. of the total number for the season was attributed to railway operation on about 5,000 miles through forest section. The worst conditions obtain on the Canadian Government Railway, where 332 fires out of a total of 549 railway fires, or 60 per cent., occurred. The Canadian Northern Railway Company was required by the Dominion Board of Railway Commissioners to place special patrolmen on some 500 miles of their lines. In addition, the Forestry Branch maintained speeder patrol on some 1,265 miles, mainly on the T. & N. O. and C. G. R.

Throughout the season inspections of fire protective appliances on locomotives on railway lines under the jurisdiction of the Board of Railway Commissioners were

*Stands averaging up to 6 inches were classified as "young growth;" above that as "timber land."

made by provincial officers authorized by the Board. Also the Temiskaming and Northern Ontario Railway Commission, which is not subject to the Board, entered into an arrangement with the Forestry Branch to permit a similar inspection of their locomotives. In all, 771 locomotives were inspected during the summer, of which 229, or 30 per cent., showed defective screens, ash pans or other appliances. This bad showing is in part explainable by the greatly increased volume of transportation coupled with a shortage of mechanic labour.

Other Causes.—Next to locomotives the commonest source is the neglected camp fire. This form of carelessness caused 154 fires, or 14 per cent. of the total. It is to be noted that 51 of the 154 were traced to the neglect of Indians in the western end of the Province.

Settlers clearing land caused 91 fires or 8 per cent. of the total. These were largely outside the area where permits are required.

Area Burned.—The total area reported burned over was 384,164 acres. Of this, around 38 per cent. was cutover land with some coniferous (softwood) timber remaining; 22 per cent. barrens; 19 per cent. coniferous timbered land; and 16 per cent. coniferous young growth (up to six inches). The fact that cutover land and young growth make up 54 per cent. of the total burned area, indicates clearly the influence of the slash and debris accompanying logging operations on the fire hazard. Forest protection can reach only a certain degree of efficiency without a consideration of the matter of brush disposal. Burned timber can usually be salvaged and is of less consequence than the oncoming crop.

Fifty per cent. of all fires did not exceed 5 acres in extent. In only 6 of the 34 fire districts did the total area burned over exceed 5,000 acres. Of the total acreage burned over, 304,677 acres were in the Kenora and Rainy River Districts, leaving 79,487 acres for the remainder of the Province. The large total in the west was caused by fires getting beyond control in the first part of the season during a prolonged dry spell. For instance, in the north-eastern part of Kenora District two fires starting from neglected Indian camp fires burned over 19,200 and 51,200 acres respectively, while another of unknown origin burned over 40,960 acres. Sparks from locomotives on the Canadian Government Railway set fires which burned over 20,160 acres in the vicinity of Millidge, 11,520 acres around Malachi and 12,800 acres north-east of Sioux Lookout. One lumbering concern caused 35 fires by using defective engines on their logging road, burning over 5,081 acres.

(5) *Permit System.*

The close season lasts from 15th April to 30th September. For the application of the regulations regarding the setting out of fire the forest region is divided into "Permit Areas" and "Exempt Areas."

The Permit Area includes those portions of the Districts of Nipissing, Temiskaming, Sudbury and Algoma, north of the C.P.R. from Mattawa to North Bay, and north of the C.N.R. from North Bay westward. Within this territory no fires may be set out without a permit from a fire ranger.

The remainder of the Province forms the Exempt Area, within which a permit is required only in the cases of those persons who have been so notified in writing by the Chief Ranger. This provides for the establishment of Permit Areas locally where conditions require it.

The season was unfavourable for cleaning up land, and only 3,486 permits to burn were issued, covering 15,186 acres, largely in Temiskaming. For a new regulation, the Forestry Branch received hearty co-operation from those concerned, and but three prosecutions were necessary.

(6) *Improvement Work.*

During the season sixty-two lookout towers were constructed; these are wooden frame towers running from thirty to ninety feet in height. In addition, twenty-six observation points were built by ladder construction on suitable trees. Along canoe routes trails were cut to all high vantage points. Owing to labour shortage and the difficulty of obtaining materials the majority of these towers are not yet connected up to telephone systems. In all only thirty miles of telephone were added this season.

The other main new improvements were:

New trails built and existing ones repaired	1,931 miles.
Rangers' cabins, 12' x 16'	44
Boat houses	3
Hose houses	3
Motor car houses	3
Oil houses	2
Gowganda storehouse, 18' x 20'.	
Gogama storehouse, 30' x 50'.	
Bisco storehouse, 22' x 32'.	
Cochrane storehouse, 40' x 70'.	
Dams, docks, etc.	

The material for improvement work cost \$7,000.00.

(7) *Equipment.*

The equipment for a force of 1,000 rangers represents a large outlay. During the year there was spent on equipment \$33,000, and \$5,500 additional on expendable equipment. Specially might be mentioned a 40-foot power boat for Lake of the Woods, equipped with a Gould rotary pump and 1,000 feet of 1½-inch hose. The boats on Winnipeg River and Lake Nipigon were similarly equipped with pumps and hose. Four portable fire pumps were acquired, but delivered too late in the season to be used. Five Ford auto trucks were purchased for use largely in issuing permits. Twenty-eight railway velocipedes were added to the stock. Some 65,000 fire signs were posted.

(8) *Railway Inspection Under B.R.C.*

With the exception of the T. & N. O. and C. G. Railways the lines operated in the Province are subject to the orders of the Dominion Railway Board. Twelve provincial inspectors were appointed officers of the Board to superintend the carrying out of the regulations of Order 107. These men report on all fires originating within 300 feet of the track, inspect fire appliances on locomotives, report on right-of-way conditions, and otherwise carry out the requirements of the Board.

Appended is the annual statistical summary.

STATISTICAL REPORT OF FIRES ORIGINATING WITHIN 300 FEET OF RAILWAY LINES IN
ONTARIO FOR THOSE LINES SUBJECT TO THE JURISDICTION OF THE BOARD
OF RAILWAY COMMISSIONERS FOR CANADA. SEASON, 1917.

	C. N. R.	G. T. R.	C. P. R.	A. C.	A. E.	Totals
<i>(a) Railway Fires:</i>						
1. Number, by causes:—						
(a) Locomotives, Class A fires	9	4	3	.....	1	17
Class B fires	52	22	44	.....	1	119
(b) Employees, Class A fires.	1	1	1	.....	.....	3
Class B fires.	8	.....	5	.....	1	14
(c) Total of Class A fires	10	5	4	.....	1	20
Total of Class B fires	60	22	49	.....	2	133
Total of railway fires	70	27	53	.....	3	153
2. Areas burned:—						
(a) Young forest growth, acres	124	117	82	.....	15	338
(b) Timber land	60 $\frac{3}{4}$	9 $\frac{1}{2}$	40	.....	.....	110 $\frac{1}{4}$
(c) Slashing or old burn	3,306 $\frac{1}{2}$	45 $\frac{1}{2}$	1,692 $\frac{1}{2}$	.....	25	5,069 $\frac{1}{2}$
(d) Other classes of land	38 $\frac{3}{4}$	74 $\frac{3}{8}$	617 $\frac{1}{4}$	.....	3	733 $\frac{3}{8}$
(e) Total	3,530	246 $\frac{3}{8}$	2,432 $\frac{1}{2}$	.....	43	6,251 $\frac{1}{2}$
3. Value of property destroyed:	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
(a) Young forest growth	36 00	48 00	27 00	.....	10 00	121 00
(b) Standing timber	260 00	.....	3 00	.....	.....	263 00
(c) Forest products .....	.....	.....	.....	.....	.....	.....
(d) Other property	329 65	241 10	304 00	.....	.....	874 75
(e) Total	625 65	289 10	334 00	.....	10 00	1,258 75
<i>(b) Known Causes other than Railway Systems.</i>						
1. Number due to:—						
(a) Campers and Travellers.						
Class A fires .....	.....	.....	.....	.....	.....	.....
Class B fires .....	.....	.....	.....	.....	.....	.....
(b) Settlers, Class A fires	1	.....	.....	.....	.....	1
Class B fires	2	.....	.....	.....	.....	2
(c) Other known causes,						
Class A fires .....	.....	.....	.....	.....	.....	.....
Class B fires	3	.....	1	.....	.....	4
(d) Total of Class A fires	1	.....	.....	.....	.....	1
Total of Class B fires	5	.....	1	.....	.....	6
Total of other known causes	6	.....	1	.....	.....	7
2. Areas burned:						
(a) Young forest growth ....	.....	.....	.....	.....	.....	.....
(b) Timber land .....	.....	.....	.....	.....	.....	.....
(c) Slashing or old burn	503	.....	2 $\frac{1}{2}$	.....	.....	505 $\frac{1}{2}$
(d) Other classes of land	$\frac{1}{4}$	.....	.....	.....	.....	$\frac{1}{4}$
(e) Total	503 $\frac{1}{4}$	.....	2 $\frac{1}{2}$	.....	.....	505 $\frac{1}{4}$
3. Value of property destroyed:	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
(a) Young forest growth ....	.....	.....	.....	.....	.....	.....
(b) Standing timber .....	.....	.....	.....	.....	.....	.....
(c) Forest products	240 00	.....	.....	.....	.....	240 00
(d) Other property .....	.....	.....	.....	.....	.....	.....
(e) Total	240 00	.....	.....	.....	.....	240 00

STATISTICAL REPORT OF FIRES ORIGINATING WITHIN 300 FEET OF RAILWAY LINES
IN ONTARIO, ETC.—Continued.

	C. N. R.	G. T. R.	C. P. R.	A. C.	A. E.	Totals
<i>(c) Fires of Unknown Origin:</i>						
1. Number:—						
(a) Total of Class A fires	9	1	1	.....	1	12
(b) Total of Class B fires	22	2	24	1	3	52
(c) Total of all unknown fires	31	3	25	1	4	64
2. Areas burned:						
(a) Young forest growth			31	.....		31
(b) Timber land			14	.....		14
(c) Slashing or old burn ...	1,797	35	4,912 $\frac{1}{2}$	$\frac{1}{4}$	100	6,844 $\frac{3}{4}$
(d) Other classes of land	18 $\frac{1}{2}$	.....	148 $\frac{3}{4}$	.....	10	176 $\frac{3}{4}$
(e) Total	1,815 $\frac{1}{2}$	35	5,106	$\frac{1}{4}$	110	7,066 $\frac{1}{2}$
3. Value of property destroyed:	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
(a) Young forest growth .....	.....	.....	7 00	.....	.....	7 00
(b) Standing timber .....	.....	.....	108 00	.....	.....	108 00
(c) Forest products .....	.....	37 50	.....	61 50	2,383 70	2,482 70
(d) Other property	60 00	.....	495 00	.....	.....	555 00
(e) Total	60 00	37 50	610 00	61 50	2,383 70	3,152 70
<i>(d) Grand Totals for all Causes:—</i>						
1. Number:—						
(a) Total of all Class A fires..	20	6	5	.....	2	33
(b) Total of all Class B fires..	87	24	74	1	5	191
(c) Total of all fires reported.	107	30	79	1	7	224
2. Areas burned:						
(a) Young forest growth	124	117	113	.....	15	369
(b) Timber land	60 $\frac{3}{4}$	9 $\frac{1}{2}$	54	.....	.....	124 $\frac{1}{2}$
(c) Slashing or old burn	5,606 $\frac{1}{2}$	80 $\frac{1}{2}$	6,607 $\frac{1}{2}$	$\frac{1}{4}$	125	12,420 $\frac{1}{2}$
(d) Other classes of land	57 $\frac{1}{2}$	74 $\frac{3}{4}$	765 $\frac{3}{4}$	.....	13	910 $\frac{3}{4}$
(e) Total	5,848 $\frac{1}{2}$	281 $\frac{3}{4}$	7,540 $\frac{5}{8}$	$\frac{1}{4}$	153	13,823 $\frac{3}{4}$
3. Value of property destroyed:	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
(a) Young forest growth	36 00	48 00	34 00	.....	10 00	128 00
(b) Standing timber	260 00	.....	111 00	.....	.....	371 00
(c) Forest products	240 00	37 50	.....	61 50	2,383 70	2,722 70
(d) Other property	389 65	241 10	799 00	.....	.....	1,429 75
(e) Total	925 65	326 60	944 00	61 50	2,393 70	4,651 45

II. REFORESTATION.

The nurseries at the Provincial Forest Station, Norfolk County, contain at present the following plants:

White Pine transplants	150,000
Scotch Pine transplants	20,000
Scotch Pine seedlings	100,000
Jack Pine transplants	25,000
Jack Pine seedlings	50,000
White Cedar seedlings	25,000
Red Pine seedlings	25,000
Miscellaneous conifers	10,000
Black Walnut seedlings	30,000
Butternut seedlings	10,000
Sugar Maple seedlings	75,000
White Maple seedlings	50,000
Red Maple seedlings	5,000
Manitoba Maple seedlings	2,000
White Ash seedlings	10,000
American Elm seedlings	5,000
Tulip or Whitewood	5,500
Carolina Poplar cuttings	25,000
Miscellaneous Hardwoods	8,000
Total	630,500

The production of planting material in the nurseries this past season is low owing to the difficulty of procuring suitable seed. Scotch Pine, one of our best trees for waste land planting, is grown largely in Europe, whence we obtain our seed. At present it is impossible to obtain reliable seed of this tree. The native Red Pine is an important tree in connection with this work and we have not had a crop of seed for two years.

The experimental plantations made at this Station during the past years are showing splendid growth. The earliest plantation of pine, made in 1909 on a blow sand ridge, is now twelve to fifteen feet in height and is of great interest to visitors.

During this season we shipped to other parts of the Province about 100,000 plants. Applications for planting material are not coming in as they did previous to the war, and I presume this is largely due to lack of labour.

III. TREE DISEASES.

This has reference largely to the White Pine Blister Rust.

During the season twenty inspectors were engaged in scouting for the disease, and eradicating the currant and gooseberry hosts. This work was carried on with the co-operative supervision of the Dominion Plant Pathologist at St. Catharines, Mr. W. A. McCubbin, to whom we are greatly indebted for this assistance.

On the opening of the fall term the public schools of old Ontario were circularized with a description of the disease and requested to send in suspected currant leaves. Some 4,500 teachers were reached, of whom 1,450 sent in material. This method showed the disease to be much more widely spread than had been thought. The Forestry Branch takes this occasion to express its sincere thanks to the county inspectors, teachers and pupils for their hearty co-operation.

The disease has now been found in thirty-eight counties. So far as known, the northern limit to which it has progressed is a line through northern Simcoe and Ontario, southern Haliburton, southern Peterborough and eastward, and all the peninsula east of Perth town, with an outlying infection at Petawawa. The situa-

tion is accordingly very serious, as it is probable the disease cannot now be stamped out. It would appear that local control, by eradication along the northern limit, is the only practicable measure left.

The disease exists in the following counties: Brant, Bruce, Carleton, Dufferin, Dundas, Durham, Elgin, Frontenac, Glengarry, Grenville, Grey, Haldimand, Haliburton, Halton, Huron, Kent, Lanark, Leeds, Lennox and Addington, Lincoln, Middlesex, Norfolk, Northumberland, Ontario, Oxford, Peel, Perth, Peterborough, Prescott, Renfrew, Russell, Simcoe, Victoria, Waterloo, Welland, Wellington, Wentworth, York.

The Provincial Forester attended a White Pine Blister Rust conference at Pittsburg on the 12th and 13th of November. This conference was called in order to bring together the results of investigations which have been carried on in the United States and Canada.

The reports presented at this meeting show that the disease is present in all the north-eastern States, in Quebec, in Ontario, and as far west as Minnesota; that in some states it is so widespread that its entire eradication is hopeless.

The general conclusion reached at the Pittsburg meeting was that this disease cannot be eradicated, but that white pine can still be grown where local control measures are adopted. This was the opinion expressed by the leading plant pathologists from both countries.

Following the Pittsburg conference a meeting was called at Ottawa of representatives of the Dominion Department of Agriculture, Department of the Interior, the Conservation Commission, Ontario Agricultural College, Departments of Lands and Forests of Quebec and Ontario, and the Lumbermen's Association. After a thorough consideration of the whole situation in Canada the following conclusions and recommendations were arrived at:

1. That it is in the opinion of this meeting at present not feasible, from the practical viewpoint, to eradicate the disease from the heavily infected white pine region in Eastern Canada. This meeting is, nevertheless, of the opinion that much may be done to control or retard the spread of this disease to areas where it is not already found, and to minimize its injurious effects where its occurrence is apparently threatening the white pine forest of a given district.

2. That in the opinion of this meeting scouting for the purpose of finding whether the disease exists in districts not yet examined should be continued.

Inspections have been carried out thoroughly in the southern part of the Province of Ontario and it is considered that further systematic inspections in this district are unnecessary, but inspections should be continued and extended into Northern Ontario, especially between the southern districts and the main white pine areas. Scouting should be continued in the Provinces of Quebec and New Brunswick and should be extended to Nova Scotia and British Columbia.

3. That there are cases of occurrence of the rust on domestic Ribes, especially in isolated positions, where it would be advisable to take steps for the eradication of the domestic Ribes, and in such cases that action should be taken.

An instance of the occurrence referred to is found in the isolated area of infection found at Petawawa, in the Province of Ontario, and while the eradication of the disease is no longer possible on large areas, experience in both Canada and the United States indicates that small centres of infection can be eradicated.

4. Restrictions to be placed on the movement of Ribes and Grossularia (currants and gooseberries) from Ontario nurseries north of a general line to be definitely located later, but which may be somewhere about the Grand Trunk Railway, Parry Sound line, and that similar action be taken in the Province of Quebec.

The plants mentioned are secondary hosts of the White Pine Blister Rust and are, undoubtedly, one of the channels by which the disease is distributed. In order to prevent the development of further areas of infection in the main white pine districts it is considered necessary to prevent the distribution of such stock through such districts.

5. That restrictions be placed on the movement of *Ribes* and *Grossularia* from nurseries in the Provinces of Ontario and Quebec to other provinces.

The distribution of such stock from nurseries in affected districts in the Provinces of Ontario and Quebec might spread the disease rapidly and nullify efforts for its control made by other means. This is specially necessary to protect the white pines of the Pacific coast. While the eastern white pine area is by far the most important on the continent a number of five-needle white pines, which are known to be susceptible to the disease, are present on the Pacific coast, covering areas of such magnitude that their freedom from the disease would be a matter of extreme importance. There is no record as yet of the presence of the disease in British Columbia or the western states, and it is considered by foresters and pathologists as extremely desirable that the disease should be kept from these areas. The measures necessary to attain this end would involve a quarantine to prevent the shipment of nursery pines and currants from the eastern infected districts into areas not yet reached by the rust.

6. The only hope of growing white pine in the future depends on our ability to keep it free from this disease. It is well recognized that in order to do this all plants of the genera *Ribes* and *Grossularia* (currants and gooseberries) must be removed from and around the pine area. It is impossible with our present knowledge to state the exact distance at which pines may be safely grown and a great deal of observation and experiment will be necessary in order to ascertain this distance. Control areas for this purpose have already been established in several of the New England states, and it is highly advisable that similar control areas should be established under Canadian conditions. If these control areas are begun immediately we shall have obtained in a few years definite information on the most critical and vital point in regard to this disease. Unless definite information of this kind can be secured shortly the encouragement of pine growing or the establishment of new pine areas will be a very uncertain project. There is still needed a great deal of investigation which can only be carried out by the plant pathologist. Some work has already been done in Canada along this line, but there are so many questions in regard to the disease which need immediate investigation that it is felt that special attention should be given to such investigation for a number of years to come.

7. The problem in its extent no longer concerns one department or government alone. It is no longer entirely a plant pathological question, but necessitates co-operative action between departments and governments, and with foresters, lumbermen, nurserymen, fruit growers, and other interests. Unless all combine in the support of necessary measures it will be impossible to carry out the work successfully as it cannot be done by government action alone.

8. That in order to ensure full co-operation and concentration of effort it is considered advisable that a commission, having executive authority to direct the necessary work to control the White Pine Blister Rust in Canada, should be formed and duly empowered by the governments and associations concerned, such commission to consist of representatives of the following bodies:

Dominion Department of Agriculture; Dominion Department of Interior; Department of Lands, Forests and Mines, Ontario; Department of Lands and Forests, Quebec; Department of Lands and Forests, New Brunswick; Canadian Lumbermen's Association; Canadian Nurserymen's Association.

9. That the moneys necessary to carry out the work should be appropriated by the governments concerned and placed at the disposal of the Commission.

10. That the total annual amount necessary to carry out this work will be about \$100,000.

I have the honour to be, Sir,

Your obedient servant,

E. J. ZAVITZ,

Provincial Forester.

Appendix No. 35.

RETURNED SOLDIERS' AND SAILORS' LAND SETTLEMENT SCHEME.

Considerable progress has been made in connection with the above plan of settlement during the past year. A temporary training school, accommodating about thirty men was constructed at Monteith, and a much larger permanent building is nearing completion. At Kapuskasing, in the Township of O'Brien, substantial buildings have been erected for the accommodation of the first colony of returned men. The chief buildings consist of nineteen dwellings, fronting on Kapuskasing River, occupied by some of the married men and their families; a large dwelling and office for the superintendent and clerk; a dormitory accommodating fifty men, with kitchen, dining-room and living-room attached; a modern school house which will be in use in January of 1918; a freight shed; a store and several other buildings of a minor class. Some forty-one men are now at Kapuskasing, to be joined at the first of the year by twenty-four of their comrades now at Monteith.

The men in the first place cleared a site for the buildings, and in addition some thirty acres on the Provincial Government farm, which will be maintained at the Colony. This clearing will be placed in crop in the spring of 1918. Their labours are now being directed to the clearing of 10 acres on the front of each 100-acre lot. When sufficient 10-acre clearings have been made to accommodate each member of the party one lot will be allowed to each man.

The men are paid from the time they enter the training school until they go on their respective lots; the rate of pay varies from \$65 to \$84.10 per month, according to the number of their dependents.

The men seem satisfied with their prospects for the future, and undoubtedly this plan of settlement will overcome a great many of the difficulties pertaining to settlement in any new country. Over 500 applications are on file.

Major T. L. Kennedy, of Dixie, also a returned soldier, is in charge of the Kapuskasing Colony.

ALBERT GRIGG,

Deputy Minister.

REPORT

OF THE

Minister of Lands, Forests and Mines

OF THE

PROVINCE OF ONTARIO

For the Year Ending 31st October

1918

PRINTED BY ORDER OF

THE LEGISLATIVE ASSEMBLY OF ONTARIO



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Stand of Second-Growth White Pine.

Report of the Minister of Lands, Forests and Mines of the Province of Ontario.

For the Year Ending 31st October, 1918.

To His Honour the Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to submit for the information of your Honour and the Legislative Assembly a report for the fiscal year ending 31st October, 1918, of the management of the Crown Lands of the Province.

CLERGY LANDS.

The collection on account of Clergy Lands was \$355.40. No land was disposed of during the year. (See Appendix No. 4, page 19.)

COMMON SCHOOL LANDS.

The collection on account of former sales was \$7,341.97. (See Appendix No. 4, page 19.)

GRAMMAR SCHOOL LANDS.

The area of these lands sold during the year was 47 acres for \$58.75. The collection on account of these and former sales was \$288.00. (See Appendix No. 4, page 19.)

UNIVERSITY LANDS.

The area of these lands sold during the year was 1,288.25 acres for \$786.01. The collection on account of these and former sales was \$1,417.31. (See Appendix No. 4, page 19.)

CROWN LANDS.

There was sold during the year for agricultural and town site areas 51,401.22 acres for \$39,775.01. The collection on account of these and former sales was \$50,253.53. There was sold for mining purposes 12,125.64 acres for \$32,180.67. There was collected on account of these and former sales \$33,535.58.

There was leased for mining purposes 3,119.46 acres for \$3,040.04. There was collected on account of these leases and those of former years \$14,009.15. There was leased of Crown lands an area of 35,424.36 acres for \$3,535.45. There was collected on account of these and the leases of former years \$68,700.58.

The total area of Crown lands disposed of by sale and lease during the year was 103,701.59 acres for a value of \$80,345.43, as compared with 165,628.06 acres sold and leased in 1917 for \$140,948.30. The total collection on account of the sales, leases, etc., was \$176,966.17. (See Appendix No. 3, page 18.)

SALES.

From Appendix No. 15 one will get a detailed statement of all land sales and patents other than those appearing in Free Grant territory. As was expected and predicted last year the number of sales made and the number of purchasers have very perceptibly dropped. For the fiscal year ending 31st October, 1918, practically only one half of the previous year's settlement was accomplished. The source of supply throughout the war was extremely limited, Ontario being the only field in effect upon which to draw, and the war with its various activities tended most acutely to render it almost impossible to secure the needed settlers. Numbers of the hardy settlers of the North at the call to arms dropped the plough and went forth to their duty, and some of the patented lands thus left were no doubt requisitioned by friends and others who might otherwise seek their own homesteads from the Crown. Over 600 settlers on Crown Lands in the North, to the knowledge of the Department, enlisted in the Canadian Expeditionary Forces, and, while numbers of these paid the supreme sacrifice, it is confidently predicted that the others, who seemed satisfied with their lot in their pioneer homes in Ontario will in time return to their farms, which have been retained for them. It is not unreasonable to expect that each will induce his friends to try their lot in the clay belt of Ontario, where health and plenty wait the willing worker.

As immigration conditions are but problematical it is impossible to adequately forecast an immediate return to a normal improvement in land purchases.

FREE GRANTS.

As predicted in the report for last year there is a notable reduction in the number of Free Grant locations effected throughout the fiscal year ending October 31st, 1918; only 372 Free Grant settlers acquired free homesteads for an area of 48,687 acres, whereas during the previous year over 600 secured locations. An additional area of 4,570 acres was taken by 110 locatees, who had the privilege of purchasing an adjoining farm for grazing or agricultural purposes.

The number permitted to assign their interests in locations to parties entitled and prepared to continue settlement totalled 166, as against 217 for the year 1917. Patents to the number of 406 were issued, slightly less than for the corresponding period immediately preceding.

Conditions imposed by the war and the general decline for Free Grant, as for other class of farm land, have materially contributed towards the declining figures in Free Grant transactions. Many of the townships in Free Grant territory appearing in Appendix No. 14 have been opened for years and practically all the choice land therein has been sought, but so long as an occasional lot may be left and desired the township remains in the market and attached to a regular agent. No new townships were opened during the year under the Free Grant Section of the Public Lands Act as the necessity did not exist, and only the future can with a degree of certainty say to what extent the demand for Free Homestead Land may grow, but at present the outlook for transcending the figures of but a few years ago is not of the brightest.

Under the Returned Soldiers' and Sailors' Land Settlement Act, 1917, free locations along with other privileges were given to 53 returned men, 49 in the Township of O'Brien for 5,018 acres, and 4 in the Township of Owens for 477 acres.

A list of the islands disposed of for Summer Resort purposes in Free Grant territory, may be found in Appendix No. 14.

MILITARY GRANTS.

Under the Veteran Land Act I. Edward VII., cap. 6, and amendments thereto have been issued 13,998 certificates, and although the time for receiving applications for these grants expired on the 30th September, 1908, there are still letters being received from men who were entitled to this grant, but claim that they have only now become aware of the fact. The applications therefore could not be accepted and no forms of applications have been sent out.

During the past year there have been located 23 of these certificates covering 3,678 acres in the townships open for veterans, making in all a total of 8,284 certificates thus located.

In eleven cases the certificates have been surrendered and applied in payment of lands purchased from the Crown, covering in all 1,760 acres making a total of 785 that have thus been applied.

There were three certificates surrendered to the Crown for the \$50.00 commutation money, making a total of 3,260 certificates surrendered in this manner.

During the year there have been issued 115 patents for lands located by veterans, and in all 7,337 have thus been disposed of.

The total number of certificates that have therefore been disposed of is 12,329 leaving 1,669 that are still outstanding.

During the year 15 veteran locations, covering 2,392 acres, were cancelled for the non-performance of the settlement duties to which they became subject on account of being assigned before patent was issued.

Under the Act I., Edward VII., cap. 6, and amendments thereto covering these grants it is necessary for all locatees of the lands granted under this Act to apply for their patents for such lands before ten years have expired from date of location. If this application for patent is not made within ten years then the land comes under the settlement regulations, and unless the settlement duties are proceeded with, the locations are liable to cancellation. Previous to the expiration of the ten years after location, the Department has sent a notice to each veteran, who should apply for his patent stating this fact, and in this manner have saved many of the locations from becoming subject to the settlement duties. See Appendix No. 11.

PATENTS, LEASES, LICENSES, ETC.

In consequence of the growing diminution during war period of land seekers and land tillers in the northern sections, fewer engrossed instruments were issued during 1918 than the previous year by over four hundred, some 1,778 having been prepared last year, as against only 1,351 for this year. These were made up of 741 settlers' patents, 337 mining and 115 veteran grants; the remaining numbers consisted of Crown Leases to the number of 20 covering a variety of subjects, including water powers, sand and gravel, ranching, etc. Of the last class eight were issued, an increase of seven over the preceding period, probably the most important ranch lease having been issued for a three thousand acre block in the Peterborough district, in Cavendish Township, where already some 350 head of cattle are being regularly maintained: inquiries in respect of the grazing possibilities and the opportunities offered are being constantly made, and the hope is expressed that in the reconstruction period, when the problems of employment and production with their concomitant economic interests are being solved, the vast acres of Ontario waste lands, now unproductive, will not be overlooked as a means to an important end.

Equally important with the growing of grain is the raising of cattle and sheep, and already it has been demonstrated in parts of the hitherto so-called useless areas of Old Ontario that the application of a little scientific knowledge and practical energy has resulted in successful cattle and sheep enterprises. Wherever and whenever Crown Lands are desired for such purposes and *bona fide* dealers make application an officer of the Department, at its expense, makes a cruise, preferably in company with the applicant, reports fully as to the wisdom of the selection, and makes any suggestion or recommendation that may be to the mutual advantage of all interested. The annual rental for ranching leases is only five cents an acre and the stocking requirements are reasonable, every effort being made to keep them from appearing prohibitive.

Approximately the same number of Licenses of Occupation issued for the year ending October 31st, 1918, some fifty, as the previous year. These included mining, lumbering, custom house sites, game and fisheries, sugar making, pipe lines, rights of ways, settlers' rights, water powers, tile manufacture, and a variety of other subjects. Rights to remove sand and gravel under certain conditions were granted to eighteen different individuals or concerns by special leases.

Sixty-eight mining leases were issued and also two leases for islands in Lake Timagami.

Under Appendix No. 8 may be found a detailed statement of all instruments prepared and issued during the fiscal year.

FINANCIAL ASSISTANCE TO SETTLERS.

Since August 12th, 1916, 1,839 applications for loans have been dealt with by the Settlers' Loan Commissioner—1,306 loans totalling \$419,286.00 have been made.

Among the benefits derived in this connection might be mentioned, increased acreage placed under cultivation, larger holdings of live stock, and improved buildings.

Payments of accrued interest and maturing principal have been remarkably prompt.

A loan of \$12,000.00 was made to the Sudbury Co-operative Creamery Co. during the fiscal year just closed. Other loans to creameries, grist mills and cheese factories will doubtless be required.

THE MINING INDUSTRY.

The mining industry of Ontario was greatly affected by the war. Nickel and copper are prime requisites for modern warfare, and the production of these metals in 1918 was on a larger scale than ever before. Silver was needed in huge quantities for the payment of troops, as well as to purchase the exportable products of silver-using countries, which owing to war conditions could not be paid for by exchange of goods. These metals have ruled at high prices, and the mining districts of Sudbury and Cobalt had a prosperous year.

Gold being the basis of international finance, was also in great demand, but as the increased cost of production, because of the fixed price of gold, could not be shifted to the consumer as in the case of the other metals, this branch of the industry was less active than it would otherwise have been. Notwithstanding this, however, the production for 1918 was slightly greater than that of the previous year. The gold camps of Porcupine and Kirkland Lake will undoubtedly, when normal prices for labour and supplies are restored, resume their former activity and undergo rapid development, and the newer areas, such as Boston Creek, Matachewan, etc., will be vigorously exploited. The growth of the mining

industry will greatly assist in the settlement of the agricultural districts of northern Ontario, since it provides a ready market for all kinds of farm products, attracts population, and furnishes employment for labour. The mining areas so far developed are, for the most part, near or within the limits of the agricultural districts, thus bringing producer and consumer into proximity and lessening transportation charges.

The mattes produced at the Sudbury smelters in 1918 contained about 44,700 tons of nickel as compared with 41,887 in 1917, and the value was say, \$26,800,000 as against \$20,493,500. The copper contents of the mattes was about 23,000 tons, valued at \$8,500,000, compared with 21,197 tons in 1917 worth \$7,842,290. The producing companies were: The International Nickel Company of Canada—a re-organization of the Canadian Copper Company and subsidiary concerns—and The Mond Nickel Company. The Alexo mine in Dundonald also contributed 10,000 or 12,000 tons of ore, which was smelted by the Mond Company at Coniston. The International Nickel Company's refinery at Port Colborne was completed during the year and put into successful operation, and has a refining capacity of 10,000 tons of nickel and a corresponding quantity of copper per annum. The British America Nickel Corporation has been steadily developing the Murray mine, and is constructing a smelter and refinery. Owing to the difficulty of obtaining a suitable supply of electric power at the mine, the latter is being erected at Hull, Quebec.

The production of silver amounted to about 17,500,000 ounces, worth \$16,675,800 as against 19,479,692 ounces in 1917, worth \$16,183,208. In value, last year's silver production was only exceeded in the history of the Cobalt camp by that of 1912, when it was \$17,408,935. The total yield of silver from these mines up to the end of 1918, has fallen little short of 300,000,000 ounces. The leading producers were the Nipissing, Mining Corporation, Kerr Lake, O'Brien, Coniagas, and McKinley-Darragh-Savage. The high price of silver not only stimulated production, but also exploration, and a number of prospects within the boundaries, or at the verge of the territory of proven value have been and continue under development.

Iron ore was produced to the extent of 154,243 tons during the first nine months of the year. With the exception of small shipments from a couple of mines in Eastern Ontario, this all came from the Magpie and Moose Mountain mines. The total quantity of pig iron produced by the blast furnaces of the Province was about 890,000 tons, valued at say \$20,000,000. To produce this, about 1,500,000 tons of iron ore were required, nearly all of which was imported from the United States.

Many minor minerals are raised in Ontario which form the bases of important and expanding industries. Iron pyrites, for example, which was mined chiefly in northwestern but also in eastern Ontario, was in large demand by the United States' makers of sulphuric acid, of which very large quantities were required for the manufacture of explosives. Imports of elemental sulphur from Sicily were entirely cut off by the war, and the deposits in Louisiana and Texas were not equal to supplying the demand for sulphur, consequently the pyrite deposits of Ontario were drawn on during the year for large shipments. It is estimated that about one-third of the total pyrite consumed by the United States during 1918 came from Ontario.

Cessation of the war will probably lead to a lessened demand for nickel, copper, pyrite, and perhaps some of the other mineral products of the Province, but as peaceful industry is again re-organized and re-established, it is quite probable that the requirements for manufacturing and trade will ere long restore the demand to at least its former level.

COLLECTIONS.

The total revenue of the Department from all sources was \$2,964,161.76. Of this, \$50,253.53 came from agricultural lands and town sites; mining lands, \$33,535.58; mining and Crown leases, \$83,774.38; miners' licenses, permits and recording fees, \$52,271.86; supplementary revenue tax, \$919,208.80. From woods and forests the revenue was \$1,756,085.25, made up of the following items, bonus, \$679,304.17; timber dues, \$795,004.08; ground rent, \$87,263.93; transfer fees, \$4,740.00; fire protection charge, \$189,773.07. (See Appendix No. 4, page 19.)

DISBURSEMENTS.

The total expenditure of the Department for ordinary service was \$965,615.73. Some of the principal items were: Crown Land agents' salaries and disbursements, \$18,202.13; homestead inspectors, \$14,978.75; Crown timber agents, \$31,088.07; forest ranging and estimation of timber, \$125,474.84; fire ranging, \$394,784.90; forest reserves, fire ranging, etc., Temagami reserve, \$48,009.52; Mississauga reserve, \$24,454.34; Nipigon reserve, \$23,457.35; Eastern reserve, \$3,424.13; Sibley reserve, \$100.00; mines and mining, \$60,802.72; mining recorders, \$23,630.95; surveys, \$40,827.29; investigation of tree diseases, \$5,410.53; contingencies, land and forests, \$39,947.14; Bureau of Mines, \$12,653.85; forestry, \$3,221.80; colonization, \$1,072.38.

A further sum of \$50,907.28 was expended under the direction of the Department, distributed as follows: Algonquin Park, \$29,866.03; Quetico Provincial Park, \$9,424.20; Veteran's Commutation, \$150.00; Royal Nickel Commission, \$10,182.05; legal investigations, \$1,285.00.

The sum of \$55,027.49 was disbursed under the provisions of the Bounty Act, Edward VII, Cap. 14. (See Appendices Nos. 6 and 7.)

WOODS AND FORESTS.

The accrued revenue from Woods and Forests for the year ending October 31st, 1918, amounted to \$1,635,684.43 which exceeded that of the previous year by \$139,620.98.

The revenue collected during same period totalled \$1,756,085.25, or \$60,382.17 in excess of amount collected during year ending October 31st, 1917.

The production of pine timber, saw log and dimension timber—during season of 1917-18 while very much less than during the seasons of 1914-15 and 1915-16 exceeded that for 1916-17 by over fifteen million feet board measure, a satisfactory increase in view of the prevailing labour conditions. With labour conditions rapidly improving and with increased demand for lumber both at home and abroad it is confidently expected that the production during the coming season will show a still greater increase.

In timber other than pine there was a falling off in production of nearly eight million feet board measure.

Over half a million more railway ties were taken out last season, the figures being 2,094,099, as against 1,544,826 for 1916-17.

Three hundred and thirty-eight thousand, five hundred and sixty-three cords of pulpwood were taken off Crown Lands an increase of 114,892 cords over the previous season.

The sale of the Kapuskasing Pulp and Timber Limit to which reference was made in 1917 report has since been carried out.

LANDS UNDER LICENSE.

The area under license at the close of the fiscal year was 16,888 square miles which was $57\frac{1}{4}$ square miles greater than for previous year.

Summary of Revenue from Woods and Forests.

Timber dues	\$795,004 08
Bonus	679,304 17
Ground rent	87,263 93
Transfer fee	4,740 00
Fire protection	189,773 07
	<hr/>
	\$1,756,085 25

CULLER'S EXAMINATION.

Two examinations were held during the year, one at North Bay and one at Kenora. Two candidates succeeded in passing the examination and were duly granted certificates authorizing them to act as Cullers. For names of Cullers who passed at these examinations, see page 63, Appendix 12. For complete list of Licensed Cullers see Minister's Report for 1917.

FIRE RANGING.

As pointed out in the Annual Report for 1917, some decided changes were made in methods of forest protection in conformance with the legislation passed during the session of 1917.

During the season of 1917-18, 9,590 permits for the burning of slash by settlers were issued as against 3,486 permits for the previous season. The acreage covered by these permits for the present season amounted to 39,683 as against 15,186 acres for the previous season. The permits are issued by members of the fire ranging staff, and, generally speaking, the settlers co-operate heartily and appear to appreciate the wisdom of the new regulations.

There were five prosecutions for infringements of the regulations under the Forest Fires Prevention Act, and convictions were registered in all cases.

The area protected was re-grouped, the new arrangement providing for 32 districts instead of 34, each district being in charge of a chief ranger as formerly. The number of territorial inspectors was increased to four instead of three as formerly, their headquarters being at Cochrane, Nipigon, Sudbury and Parry Sound, respectively. The general field work was supervised by a Provincial Superintendent with headquarters at Sudbury.

The maximum number of rangers and supervising officers was 1,190.

Improved methods were adopted to enable a closer check to be kept on the work of all men engaged in forest protection.

FOREST FIRES.

The weather, generally speaking, was favourable for forest protection. As in the case of last season, the railways furnished the most fruitful cause of fires. Over 46 per cent. of the fires reported were of railway origin. Approximately 10 per cent. of the fires reported were caused by careless campers. Eight per cent. of the total number of fires appear to have been caused by the land-clearing operations of settlers.

IMPROVEMENT WORK.

During the season, twelve lookout towers were constructed. Three hundred and four miles of new trails were cut out, and some improvements were made in the telephone systems. Fifty-eight rangers' cabins were constructed, also two boat houses, one motor car house and one garage. Numerous other improvements of a minor nature were made.

EQUIPMENT.

Additions were made to the equipment as follows: 5 Ford auto trucks; 5 portable fire pumps; 5 large boats; 3 railway motor cars; 36 railway velocipedes; 100 tents and 65 canoes. Fire signs were very widely distributed and a large number of calendars were also issued for educational effect. A booklet of instructions for all men in the field was printed and a copy furnished to each employee.

FORESTRY.

The work of the Provincial Forestry Station in Norfolk was continued. A glance at the detailed report of the Forestry Branch will show the magnitude of the work which is being carried on at this point.

TREE DISEASES.

Very important work is being done in connection with the investigation of tree diseases throughout the Province. Valuable investigations were conducted by Dr. J. H. Faull, and his report will also be found included in the general report of the Forestry Branch.

A complete summary of the work of the Forestry Branch will be found in Appendix No. 31, page 142.)

CROWN SURVEYS.

The following surveys of Crown Lands have been carried on during the year:—

Islands in the Georgian Bay and Lake Huron, in the districts of Manitoulin and Parry Sound, which completes the survey of islands in Lake Huron and Georgian Bay under the control of the Province.

Township of Kapuskasing, district of Algoma.

Township of O'Brien, district of Algoma.

Township of Idington, district of Algoma.

Township of Cumming, district of Algoma.

Township of Owens, district of Timiskaming.

Township of Williamson, district of Timiskaming.

The last five mentioned townships were surveyed into one hundred-acre lots, for the purpose of returned Soldiers' and Sailors' Land Settlement.

Traverse of the Namakan River in the district of Rainy River.

Survey of Lower Shebandowan Lake, in the district of Thunder Bay.

Survey of the boundaries of the Black Sturgeon River Pulp and Timber Limit, in the district of Thunder Bay.

Survey of Base and Meridian Lines in the districts of Thunder Bay and Timiskaming.

For Crown Surveys see Appendices Nos. 16 and 17, page 76.

MUNICIPAL SURVEYS.

Four municipalities petitioned for special surveys during the year and instructions were given authorizing the same to be made.

Three municipal surveys for which instructions were previously given were confirmed during the year under R.S.O. 1914, Cap. 166, Sections 13 and 14, such surveys being final and conclusive, including a survey of part of the Toronto and Hamilton Highway, between the westerly limit of the Town of Oakville and the City of Hamilton.

Particulars relating to these will be found in Appendices Nos. 18 and 19, pages Nos. 77 and 78.

MAPS.

New editions of the maps comprising the districts in Northern Ontario have been issued during the year and are revised from time to time as new surveys are made and additional information procured.

RETURNED SOLDIERS AND SAILORS—LAND SETTLEMENT.

Work has been continued at the Kapuskasing Colony for Returned Soldiers and Sailors during the past year. Numbers of soldier settlers are now residing on their locations and are directing their energies towards land clearing, cutting pulpwood, etc.

A full report as to the activities at the Colony will be found in Appendix No. 32, page 160.

G. H. FERGUSON,

Minister.

Department of Lands, Forests and Mines,
Toronto, October 31st, 1918.



Ontario Government Creamery,, New Liskeard.

APPENDICES

Appendix No. 1.

Return of Officers and Clerks of the Department of Lands, Forests and Mines for the year ending October 31st, 1918.

Branch.	Name.	Designation.	When Appointed.	Salary per annum.	Remarks.
Lands Branch....	Hon. G. H. Ferguson	Minister	1914, Dec. 22.....	\$6,000 00	
	Albert Grigg	Deputy Minister	1915, Oct. 13.....	4,200 00	
	C. C. Hele	Minister's Secretary and Secretary to Department			
	H. M. Robbins	Assistant to Deputy Minister	1912, Jan. 23.....	2,500 00	
	J. Farrington	Clerk	1918, Apr. 25.....	2,200 00	
	A. G. Thompson	do	1916, Jan. 6.....	1,300 00	
	W. A. Fleming	Stenographer	1909, Mar. 24.....	1,000 00	
			1915, Feb. 16.....	850 00	
	J. J. Murphy	Advisory Chief Clerk	1872, May 1.....	2,300 00	
	W. C. Cain	Chief Clerk	1903, Mar. 6.....	2,100 00	
	H. E. Johnston	Clerk of Military Grants	1907, Mar. 13.....	1,850 00	
	W. R. Ledger	Clerk of Sales	1894, Feb. 5.....	1,700 00	
	S. Draper	Clerk of Free Grants	1903, Jan. 1.....	1,600 00	
	S. A. Platt	Clerk	1907, Mar. 13.....	1,250 00	
	F. Lucas	do	1909, Mar. 24.....	1,300 00	
	J. E. Drinkwater	do	1916, May 3.....	1,300 00	
	C. S. Jones	Clerk of Patents	1890, May 22.....	2,150 00	
	W. S. Sutherland	Engrossing Clerk	1902, Jan. 13.....	1,550 00	
	C. E. Burns	Reference Clerk	1900, April 9.....	1,650 00	
	W. Carrell	Engrossing Clerk	1904, Jan. 15.....	1,450 00	
	A. E. Robillard	do do	1894, May 8.....	1,200 00	
	A. E. Roe	Clerk of Registers	1909, Mar. 24.....	1,450 00	
	S. Ross	Stenographer	1917, Oct. 30.....	900 00	
	M. Bengough	do	1896, Oct. 23.....	900 00	
	J. C. Oram	do	1907, Jan. 16.....	900 00	
	E. F. O'Neil	do	1904, Nov. 9.....	900 00	
	E. G. Halliday	do	1909, Mar. 24.....	900 00	
	B. M. Benson	do	1911, Mar. 3.....	850 00	
	E. Hills	do	1916, May 3.....	850 00	
	E. Deadey	do	1918, Oct. 16.....	800 00	Resigned August 6, 1918.
	L. V. Rorke	Director	1909, May. 5.....	3,500 00	
	J. Hutcheon	Surveyor and Draughtsman	1913, May 20.....	2,500 00	
	W. F. Lewis	Clerk	1872, Feb. 5.....	1,400 00	

Surveys	D. G. Boyd	Draughtsman	1897, Sept. 27.....	1,850 00
	E. M. Jarvis	Clerk	1904, Oct. 19.....	1,600 00
	J. B. Proctor	do	1897, Jan. 15.....	1,400 00
	B. Rusford	Draughtsman	1912, Oct. 5.....	1,200 00
	F. E. Blanchet	do	1907, Mar. 13.....	1,300 00
	A. Leaman	do	1909, Mar. 24.....	1,300 00
	H. Treeby	do	1904, Jan. 13.....	1,450 00
	J. Work	do	1911, Mar. 3.....	1,450 00
	H. M. Kirkland	Stenographer	1904, Nov. 23.....	900 00
	C. O'Connor	do	1911, Mar. 3.....	800 00
Woods and Forests	E. C. Arner	do	1911, Mar. 3.....	800 00
	J. A. G. Crozier	Advisory Chief Clerk	1897, Dec. 1.....	2,300 00
	J. Houser	Chief Clerk	1907, Mar. 13.....	2,000 00
	J. B. Cook	Clerk	1898, Aug. 1.....	1,950 00
	H. Gillard	do	1900, April 9.....	1,700 00
	F. J. Niven	do	1903, Mar. 6.....	1,650 00
	W. F. Trivett	do	1904, Jan. 13.....	1,500 00
	R. H. Hodgson	do	1904, Nov. 23.....	1,400 00
	A. H. O'Neil	do	1909, Mar. 24.....	1,200 00
	G. W. Harris	do	1909, Mar. 24.....	1,200 00
Accounts	N. L. Rogers	do	1911, Nov. 2.....	1,300 00
	S. D. Meeking	do	1910, May 12.....	1,100 00
	E. H. Squire	do	1916, April 6.....	1,100 00
	E. H. Telfer	do	1916, April 6.....	1,000 00
	C. Rowland	Stenographer	1915, Mar. 23.....	900 00
	M. E. Bliss	do	1909, Sept. 1.....	900 00
	H. Canton	do	1915, Oct. 9.....	800 00
	D. G. Ross	Accountant	1861, April 15.....	3,000 00
	H. M. Lount	Clerk	1904, Jan. 13.....	1,750 00
	C. J. Clarke	do	1907, Mar. 13.....	1,350 00
Forestry	R. Gordon	do	1913, April 30.....	1,200 00
	W. A. Burritt	do	1908, April 8.....	1,350 00
	C. Bowland	Clerk and Stenographer	1911, Mar. 3.....	900 00
	E. J. Zavitz	Provincial Forester	1912, Nov. 7.....	3,500 00
	J. H. White	Assistant Provincial Forester	1917, April 1.....	3,000 00
	F. S. Newman	Forester	1913, Sept. 23.....	1,800 00
	J. Bald	Stenographer	1914, Oct. 28.....	800 00

Appendix No. 1.—Concluded.

Return of Officers and Clerks of the Department of Lands, Forests and Mines for the year ending October 31st, 1918.

Branch.	Name.	Designation.	When Appointed.	Salary per annum.	Remarks.
Colonization	H. A. Macdonell	Director	1910, Feb. 16	2,450 00	
	J. Argue	Clerk	1905, April 1	1,700 00	
	R. A. Jones	do	1909, April 1	1,600 00	
	C. W. Garthwaite	do	1910, Nov. 1	1,300 00	
	H. Tutt	do	1911, Mar. 30	1,200 00	
	S. O. Dennis	Clerk and Stenographer	1910, Nov. 1	900 00	Transferred to Public Works, March 16, 1918.
	R. Duggan	Stenographer	1910, Feb. 1	900 00	
	F. R. Dunlop	do	1913, Jan. 1	825 00	
	B. McDonald	do	1910, Nov. 1	900 00	
Records Branch.	S. K. Burdin	Chief Clerk	1916, April 6	2,400 00	
	C. Dies	Clerk	1907, Mar. 13	1,450 00	
	A. P. Saunders	do	1913, April 30	1,200 00	
	C. W. St. John	do	1910, April 14	1,200 00	
	A. Ferguson	do	1916, April 6	1,300 00	
	W. B. Baines	do	1912, Oct. 5	1,150 00	
	F. Samuels	do	1909, Mar. 24	1,125 00	
	N. Mathewson	do	1918, April 25	1,000 00	
	H. Brophy	Mailing Clerk	1898, Oct. 1	1,100 00	
Bureau of Mines	T. W. Gibson	Deputy Minister	1891, June 19	4,200 00	
	R. D. Fisher	Secretary	1907, Mar. 13	1,700 00	
	D. H. Barr	Clerk	1907, Mar. 13	1,450 00	
	F. L. Godson	do	1915, June 18	1,100 00	
	W. Lemoine	do	1908, April 8	1,350 00	
	Anne Moffatt	do	1901, Mar. 1	1,300 00	
	A. G. Scovell	do	1909, Mar. 24	1,350 00	
	J. L. McNaughton	Clerk and Stenographer	1909, Mar. 24	900 00	
	H. W. Batchelor	Stenographer	1911, Mar. 19	850 00	
	M. Baptie	Clerk and Stenographer	1918, April 11	800 00	
	R. McElree	do	1918, April 11	750 00	

D. GEO. ROSS,
Accountant.ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 2.

List of Agents for the year ending October 31st, 1918.

Name.	Post office address	District of County.	Date of appointment.	Salary per annum.	Remarks.
<i>Land Agents.</i>					
Anderson, T. V.	Hearst	Part District of Algoma	1913, May	600 00	For salary see Homestead Inspector.
Arthurs, E.	Espanola Mills	do do	1915, May	200 00	
Baker, R. H.	Minden	Part Victoria	1907, Oct.	350 00	
Bolger, J. W.	New Liskeard	Lake Temiskaming, District of Nipissing	1913, July	900 00	
Both, C.	Denbigh	Part of Frontenac and Addington	1905, Oct.	200 00	
Brown, John	Markstay	Part of District of Nipissing and Sudbury	1916, June	500 00	
Brown, J. B.	Bracebridge	Muskoka District	1905, July	500 00	
Burrows, W. A.	Port Arthur	Part District of Thunder Bay	1912, Jan.	1,000 00	
Cameron, W.	Stratton Station.	do do Rainy River	1911, April	500 00	
Campbell, I. M.	Parry Sound	do do Parry Sound	1914, Nov.	500 00	
Dempsey, S. J.	Cochrane	do do Nipissing	1911, Feb.	1,000 00	Also Mining Recorder.
Dodds, T.	Thessalon	do do Algoma	1915, May	500 00	
Douglas, W. J.	Maynooth	do Hastings	1912, June	500 00	
Ellis, H. J.	Powassan	do District of Parry Sound	1909, May	500 00	
Freeborn, Dr. J. S.	Magnetawan	do do do	1905, Nov.	500 00	
Gibson, J. E.	Dryden	District of Rainy River	1914, Nov.	800 00	
Ginn, F. E.	Matheson	Part District of Nipissing	1912, Mar.	900 00	
Hales, W.	Apsley	do County of Peterborough	1911, July	250 00	
Hollands, C. J.	Fort Frances	do Township of Alberta and part District of Rainy River	1892, Oct.	300 00	
Jenkin, W.	Ensdale	do District of Parry Sound	1908, July	500 00	Also Mining Recorder.
McFayden, A.	Emo	do do Rainy River	1905, Sept.	500 00	
MacLennan, J. K.	Sudbury	do do Sudbury	1905, July	700 00	
Noble, E.	Sault Ste. Marie	do do Algoma	1913, Feb.	300 00	
Parsons, W. J.	North Bay	do do do	1908, April	700 00	
Philon, J. A.	Sturgeon Falls	do do Nipissing	1907, Sept.	500 00	
Prince, A.	Wilno	do do do	1905, July	500 00	
Small, R.	Kettawa	do of Renfrew	1910, June	500 00	
Spry, W. L.	Massey	do District of Nipissing	1909, Sept.	600 00	
Teasdale, R. A.	Massey	do do Rainy River	1917, July	500 00	
Watt, F.	Pembroke	do do Sudbury	1913, May	300 00	Also Mining Recorder.
Whybourne, W. E.	Marksville	do of Renfrew	1905, April	300 00	
Wilson, A. N.	Kinmount	do of St. Joseph Island	1915, June	175 00	
Woolings, J.	Englehart	do of Peterborough	1908, June	700 00	

Appendix No. 2.—Continued.

List of Agents for the year ending October 31st, 1918.

Name.	Post office address	District of County.	Date of appointment.	Salary per annum.	Remarks.
<i>Homestead Inspectors.</i>					
Barr, J.	Fort Frances	District of Rainy River	1906, Nov. 23	1,200 00	
Bastien, J. A.	Chelmsford	W. part of Sudbury District	1913, May 2	900 00	
Brown, J. B.	Bracebridge	Muskoka District	1905, July 28	1,000 00	Also Crown Lands Agent.
Burnes, C. W.	South River	Parry Sound District	1905, Nov. 15	1,000 00	
Cragg, W. V.	New Liskeard	S. part of Temiskaming District	1913, Mar. 27	1,200 00	
Dean, T.	Sault Ste. Marie	Algoma District	1908, July 29	800 00	
Hughes, T.	Murillo	Thunder Bay District	1908, July 20	1,000 00	
Quenneville, I.	Sturgeon Falls	E. part Sudbury and W. part Algoma Districts			
Owens, H. B.	Cache Bay	E. part Sudbury and W. part Algoma Districts	1906, May 7	900 00	Resigned February 28, 1918.
Smith, D.	Cochrane	N. part of Temiskaming District	1918, June 25	800 00	
Watson, T. P.	Englehart	Centre part of Temiskaming District	1912, April 16	1,500 00	
Wigle, R. G.	Dryden	Kenora District	1905, May 10	1,200 00	
			1914, May 27	1,200 00	
<i>Timber Agents.</i>					
Bremner, G.	Cochrane	Part Temiskaming and Algoma Districts	1913, May 20	1,800 00	
Christie, W. P.	Parry Sound	Part Parry Sound and Muskoka Districts	1903, Dec. 4	1,600 00	
Darby, E. J.	Ottawa	Part Ottawa District	1889, July 26	1,500 00	
Hawkins, S. J.	Webbwood	Part Algoma and Sudbury Districts	1905, Aug. 16	1,600 00	
Henderson, C.	Sudbury	do	1902 Jan. 1	2,000 00	
Huckson, A. H.	Sault Ste. Marie	Part District of Algoma	1914, April 1	1,800 00	
Johnson, S. M.	Arnprior	Part Ottawa and Parry Sound Districts	1907, Jan. 11	1,600 00	Died November 22, 1917.
MacDonald, S. C.	New Liskeard	Part Temiskaming District	1907, Jan. 21	1,700 00	
Margach, W.	Kenora	Kenora District	1889, May 16	1,600 00	
McDonald, H.	Thessalon	Part District of Algoma	1905, April 20	1,500 00	
McDougall, J. T.	North Bay	Nipissing and Part Sudbury District	1908, July 8	1,700 00	
Oliver, J. A.	Port Arthur	Thunder Bay District	1905, Sept. 30	1,700 00	
Stevenson, A.	Peterborough	Belleville	1905, Oct. 4	1,500 00	
Watts, G.	Fort Frances	Rainy River District	1910, April 19	1,500 00	Resigned October 1, 1918.
Wood, W. G. A.	South Porcupine	Porcupine District	1917, Feb. 28	1,400 00	

Mining Recorders.

Mining Recorders.						
Browning, A. J.	Elk Lake	Montreal River Mining Division	1913, July	15	1,200 00	Died April 30, 1918.
Campbell, C. A.	Sudbury	Sudbury Mining Division	1910, Jan.	6	1,200 00	
Gauthier, G. H.	South Porcupine.	Porcupine Mining Division	1912, July	16	1,500 00	
Hough, J. A.	Matheson	Larder Lake Mining Division	1907, May	22	1,400 00	
Miller, N.	Sault Ste. Marie.	Sault Ste. Marie Mining Division	1915, June	9	1,100 00	
Morgan, J. W.	Port Arthur	Port Arthur Mining Division	1906, Dec.	28	1,100 00	
Morgan, M. R.	Tashota	Kowkash Mining Division	1916, Mar.	10	1,000 00	Resigned August 31, 1918.
McAulay, N. J.	Haileybury	Temiskaming Mining Division	1915, May	8	1,900 00	
McQuire, H. F.	Parry Sound	Parry Sound Mining Division	1906, Sept.	26	500 00	
Sheppard, H. E.	Elk Lake	Gowganda Mining Division	1909, Feb.	10	1,100 00	
Spry, W. L.	Kenora	Kenora Mining Division	1909, Sept.	21	900 00	Also Crown Lands Agent.
Emigration Agents.						
Reid, R.	London	England	1913, Feb.	7	6,500 00	Died October 21, 1918.
Clark, J. M.	London	do	1913, Mar.	17	3,500 00	

D. GEO. ROSS,
Accountant.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 3.

Statement of Lands Sold and Leased. Amount of Sales and Leases and Amount of Collections
for the year ending October 31st, 1918.

Service.	Acres sold and leased.	Amount of sales and leases.	Collection on sales and leases.
<i>Lands Sold:</i>		\$ c.	\$ c.
Agricultural and Townsites.....	51,401.22	39,775 01	50,253 53
Mining	12,125.64	32,180 67	33,535 58
Clergy Lands			355 40
Common School Lands	292.00	906 50	7,341 97
Grammar School Lands	47.00	58 75	288 00
University Lands	1,288.25	786 01	1,417 31
<i>Lands Leased:</i>			
Mining	3,119.46	3,040 04	14,009 15
Crown	35,424.36	3,535 45	68,700 58
Temagami	31.66	63 00	1,064 65
	103,701.59	80,345 43	176,966 17

D. GEO. ROSS,
Accountant.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 4.

Statement of Revenue of the Department of Lands, Forests and Mines for the year ending
October 31st, 1918.

Service.	\$	c.	\$	c.	\$	c.
LAND COLLECTIONS.						
<i>Crown Lands:</i>						
Agricultural	45,748	83				
Townsites	4,504	70				
			50,253	53		
Mining Sales			33,535	58		
Clergy Lands	355	40				
Common School Lands	7,341	97				
Grammar School Lands	288	00				
University Lands	1,417	31				
			9,402	68		
<i>Rent:</i>					93,191	79
Mining Leases	14,009	15				
Temagami Leases	1,064	65				
			15,073	80		
Crown Leases	19,628	53				
Sand and Gravel Royalty	29,464	21				
" " Rentals	3,469	66				
Water Powers	15,016	68				
Algonquin Provincial Park	1,121	50				
			68,700	58		
					83,774	38
Miners' Licenses	24,035	60				
Permits	945	00				
Recording Fees	27,291	26				
			52,271	86		
<i>Supplementary Revenue:</i>						
Acreage Tax	29,301	62				
Profit Tax	863,547	75				
Gas Tax	26,359	43				
			919,208	80		
					971,480	66
WOODS AND FORESTS.						
Bonus			679,304	17		
Timber Dues			795,004	08		
Ground Rent			87,263	93		
Transfer Fees			4,740	00		
Fire Protection			189,773	07		
					1,756,085	25
Provincial Assay Fees	722	35				
Casual Fees	976	00				
Cullers' Fees	80	00				
Forest Reserves Guides' Fees	130	00				
			1,908	35		
Algonquin Provincial Park	17,982	93				
Quetico Provincial Park	1	00				
			17,983	93		
			1,384	53		
Sale of Provincial Ore					21,276	81
REFUNDS.						
Forest Ranging			33,381	77		
Fire Ranging			1,930	15		
Surveys			1,161	70		
Algonquin Park Cleaning Right-of-Way			1,117	61		
Contingencies			246	43		
Colonization			207	57		
Agents' Salaries			155	80		
Insurance			59	15		
Mines and Mining			47	50		
Advertising			25	00		
Mining Recorders'			11	44		
Forest Reserves			4	75		
Mineral Display at Exhibitions			4	00	38,352	87
					2,964,161	76

D. GEO. ROSS,
Accountant.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 5.

Statement of Receipts of the Department of Lands, Forests and Mines for the year ending
October 31st, 1918, which are considered as Special Funds.

Service.	\$ c.	\$ c.
<i>Clergy Lands.</i>		
Principal	149 44	
Interest	205 96	355 40
<i>Common School Lands.</i>		
Principal	4,142 81	
Interest	3,199 16	7,341 97
<i>Grammar School Lands.</i>		
Principal	180 00	
Interest	108 00	288 00
<i>University Lands.</i>		
Principal	1,031 88	
Interest	385 43	1,417 31
		<u>\$9,402 68</u>

D. GEO. ROSS,
Accountant.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 6.

Statement of Disbursements of the Department of Lands, Forests and Mines, for the year ending October 31st, 1918.

Service.	\$	c.	\$	c.	\$	c.
AGENTS' SALARIES AND DISBURSEMENTS.						
<i>Land, \$18,202.13.</i>						
Anderson, T. V.	600	00				
Disbursements	33	50				
			633	50		
Arthurs, E.			200	00		
Baker, R. H.	350	00				
Disbursements	7	27				
			357	27		
Bolger, J. W.	900	00				
Disbursements	186	83				
			1,086	83		
Both, C.			200	00		
Brown, John	500	00				
Disbursements	16	37				
			516	37		
Burrows, W. A.	1,000	00				
Disbursements	289	95				
			1,289	95		
Cameron, W.	500	00				
Disbursements	24	50				
			524	50		
Campbell, Miss I. M.	500	00				
Disbursements	15	00				
			515	00		
Dempsey, S. J.	1,000	00				
Disbursements	55	00				
			1,055	00		
Dodds, T.	500	00				
Disbursements	11	00				
			511	00		
Douglass, W. J.			500	00		
Ellis, H. J.			500	00		
Freeborn, J. S.	500	00				
Disbursements	5	00				
			505	00		
Gibson, J. E.	683	32				
Disbursements	151	70				
			835	02		
Ginn, F. E.	841	00				
Disbursements	239	80				
			1,080	80		
Hales, W.			250	00		
Hollands, C. J.			300	00		
Jenkin, W.	500	00				
Disbursements	7	11				
			507	11		
McFayden, A.	500	00				
Disbursements	45	65				
			545	65		
MacLennan, J. K.			700	00		
Carried forward			12,613	00		

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		12,613 00	
AGENTS' SALARIES AND DISBURSEMENTS— <i>Continued.</i>			
<i>Land.—Concluded.</i>			
Noble, E.		300 00	
Parsons, W. J.	641 66		
Disbursements	159 40		
		801 06	
Philon, J. A.	500 00		
Disbursements	19 32		
		519 32	
Prince, A.	500 00		
Disbursements	28 50		
		528 50	
Small, R.	500 00		
Disbursements	22 75		
		522 75	
Spry, W. L.	600 00		
Disbursements	290 25		
		890 25	
Teasdale, R. A.	500 00		
Disbursements	6 00		
		506 00	
Watt, F.		300 00	
Whybourne, W. E.	300 00		
Disbursements	3 75		
		303 75	
Wilson, A. N.	175 00		
Disbursements	7 50		
		182 50	
Woollings, J.	700 00		
Disbursements	35 00		
		735 00	
<i>Homestead Inspectors, \$14,978.75.</i>			
Barr, J.	1,200 00		
Disbursements	500 25		
		1,700 25	
Bastien, J. A.	900 00		
Disbursements	99 75		
		999 75	
Brown, J. B.	1,000 00		
Disbursements	314 41		
		1,314 41	
Burnes, C. W.	1,000 00		
Disbursements	134 39		
		1,134 39	
Cragg, W. V.	1,200 00		
Disbursements	230 92		
		1,430 92	
Dean, T.	800 00		
Disbursements	109 30		
		909 30	
Hughes, T.	1,000 00		
Disbursements	593 90		
		1,593 90	
Owens, H. B.	266 66		
Disbursements	136 35		
		403 01	
<i>Carried forward</i>		27,688 06	

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.	\$	c.
<i>Brought forward</i>			27,688	06		
<i>AGENTS' SALARIES AND DISBURSEMENTS—Continued.</i>						
<i>Homestead Inspectors.—Concluded.</i>						
Quenneville, I.	300	00				
Disbursements	80	80				
			380	80		
Smith, D.	1,500	00				
Disbursements	376	87				
			1,876	87		
Watson, T. P.	1,200	00				
Disbursements	412	05				
			1,612	05		
Wigle, R. G.	1,200	00				
Disbursements	423	10				
			1,623	10		
<i>Timber, \$31,088.07.</i>						
Bremner, G.	1,800	00				
Disbursements	332	24				
			2,132	24		
Christie, W. P.	1,600	00				
Disbursements	276	68				
			1,876	68		
Hawkins, S. J.	1,550	00				
Disbursements	315	08				
			1,865	08		
Henderson, C.	2,000	00				
Webster, W. A., Assistant	505	00				
Disbursements	262	20				
			2,767	20		
Huckson, A. H.	1,616	67				
Disbursements	459	84				
			2,076	51		
Johnson, S. M.	133	00				
Disbursements	304	58				
			437	58		
MacDonald, S. C.	1,700	00				
Disbursements	135	53				
			1,835	53		
Margach, W.	1,600	00				
Legris, J., Assistant	1,600	00				
Cunningham, E. A., Stenographer	456	50				
Disbursements	639	43				
			4,295	93		
McDonald, H.	1,500	00				
Disbursements	178	83				
			1,678	83		
McDougall, J. T.	1,700	00				
Disbursements	515	86				
			2,215	86		
Oliver, J. A.	1,700	00				
Porter, M., Stenographer	70	95				
Campbell, M., Stenographer	486	53				
Disbursements	801	34				
			3,058	82		
Stevenson, A.	1,500	00				
Disbursements	338	95				
			1,838	95		
<i>Carried forward</i>			59,260	09		

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		59,260 09	
AGENTS' SALARIES AND DISBURSEMENTS.— <i>Concluded.</i>			
<i>Timber.—Concluded.</i>			
Watts, G.	1,500 00		
McDonald, A., Assistant	1,500 00		
Disbursements	249 29	3,249 29	
Wood, W. G. A.	1,300 00		
Disbursements	459 57	1,759 57	
<i>Miscellaneous, \$2,772.90.</i>			
Bilton, G., Caretaker, Islands in North and South Crosby		31 25	
Butler, E. W. D., Valuating Water Lots, Port Arthur		500 00	
Guthrie, W., Caretaker, Islands in Devil's Lake ..		25 00	
Jamieson, W. H., Caretaker, Islands in Dog and Laboria Lakes		50 00	
Long, H. E., Building and Equipment, South Porcupine		900 00	
McArthur, T. A., Inspector of Agencies	748 00		
Disbursements	518 65	1,266 65	
OTTAWA AGENCY.			67,041 85
Darby, E. J., Agent		1,500 00	
Larose, S. C., Clerk		1,000 00	
Rent	700 00		
Disbursements	107 95	807 95	
FOREST RANGING, \$125,474.84.			3,307 95
Acheson, I. M.		1,613 50	
Allanson, J. A.		515 00	
Allen, R. A.		1,067 00	
Alk, J. C.		106 00	
Arnell, Wm.		1,534 00	
Bailey, A.		940 00	
Baldson, Geo.		95 00	
Barrett, Thos.		764 50	
Bates, R.		735 00	
Benning, J.		33 00	
Blastorah, B.		320 00	
Boice, R.		112 00	
Boiley, H.		124 00	
Braman, C.		103 00	
Bremner, G. A. Disbursements		74 38	
Bromley, Ed.		895 50	
Bromley, T. A.		1,185 00	
Brooks, J. W.		895 00	
Brown, J. A.		1,287 00	
Buisson, Wm.		690 00	
Carroll, P.		297 00	
Castonguay, A. C.		687 50	
Charlebois, E.		225 00	
Chenier, D. A.		1,721 50	
Christie, W. P. Disbursements		5 20	
Clairmont, E.		715 00	
<i>Carried forward</i>		16,740 08½	70,349 80

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		16,740 08	70 349 80
FOREST RANGING.—Continued.			
Clark, W. R.		709 50	
Cloud, Wm.		343 00	
Comer, B. F.		630 00	
Connelly, D.		745 00	
Corrigan, R. T.		1,661 00	
Coyne, P.		775 00	
Cross, R. J.		725 00	
Cullen, M.		200 00	
Curly, Miss V. Stenographer		194 99	
Dawkins, J. J.		962 50	
Dennie, F. J.		891 00	
Didier, H.		995 00	
Dillon, J. R.		1,235 00	
Doxsee, J. E.		623 00	
Dulmage, J.		15 00	
Dunn, J. F.		825 00	
Durrell, Wm.		1,699 00	
Duval, C. A.		830 50	
Elliott, Ed.		21 00	
Fairbairn, N. H.		555 50	
Ferguson, A. E.		980 00	
Fisher, Geo.		1,116 50	
Fletcher, N.		885 50	
Fraser, W. A.		711 00	
Fraser, R. T.		477 00	
Graham, Chas.		156 00	
Hagan, E. G.		951 50	
Hale, John		460 00	
Hamburg, M. A.		52 00	
Hamilton, Fred.		702 00	
Hand, Thos.		20 00	
Harris, C.		260 00	
Hart, I.		699 00	
Hartley, C.		1,435 50	
Harvey, A.		72 00	
Hawkins, S. J.		112 80	
Henderson, A. E.		637 00	
Henderson, L. E.		1,595 00	
Henderson, A. E.		709 50	
Henderson, Chas. Disbursements		866 88	
Hey, Ben.		795 00	
Hoff, M.		918 50	
Hogan, J.		560 00	
Hogarth, J.		925 00	
Huckson, E.		156 00	
Huckson, A. H. Disbursements		827 41	
Hurdman, W. H.		715 00	
Hutton, John		1,523 50	
Jamieson, J.		645 00	
Jeroux, A.		132 00	
Johnson, Wm.		28 00	
Kelley, T.		730 50	
Kernahan, G. A.		645 00	
Kitchen, James		52 00	
Lagenness, Leo.		72 00	
Latour, F.		104 00	
Lee, J. B.		990 00	
Legris, J. Disbursements		153 30	
Leroy, L. H.		695 00	
<i>Carried forward</i>		54,942 46	70 349 80

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		54,942 46	70 349 80
<i>FOREST RANGING.—Continued.</i>			
Lilevre, J.		93 00	
Linklater, Geo.		214 50	
Little, T.		630 00	
Lowe, W. C.		565 00	
MacDonald, S. C. Disbursements		50	
Macdonell, R. D.		790 00	
Manice, Wm.		1,435 50	
Margach, Wm. Disbursements		1,316 85	
Margach, J. A.		1,595 00	
Menzies, Alex.		1,870 00	
Milway, J. H.		1,056 00	
Molyneaux, Geo.		863 50	
Moody, L. A.		630 00	
Mooney, L.	1,967 00		
Disbursements	168 14		
		2,135 14	
Moran, A.		1,870 00	
Morel, A.		134 50	
Murray, Wm.		2,216 50	
Murray, Thos.	250 00		
Disbursements	25 60		
		275 60	
McAulay, W. D.		805 00	
McCallum, A.		200 00	
McCaw, J. E.		775 00	
McCaw, J. G.	1,864 50		
Disbursements	43 30		
		1,907 80	
McDonald, J. D.		1,864 50	
McDonald, Thos.		614 50	
McDonald, F.		56 00	
McDonald, Hector Disbursements		33 75	
McDonnell, J. R.		880 00	
McDougall, J. T. Disbursements		206 35	
McFarlane, J. D.		561 00	
McGillivray, D. D.		510 00	
McGregor, W. H.		216 00	
McGuire, C.		279 00	
McIvor, J. A.		1,170 00	
McKendry, W. B.		830 00	
McLaughlin, John		647 00	
McLay, A.		690 00	
McLean, John		1,941 50	
McLeod, E. H. Disbursements		14 72	
McNabb, A.		870 00	
McPherson, J. S.		1,798 50	
Nault, James		1,609 00	
Nephew, D.		150 00	
Nevison, W. H.		778 25	
Niblett, James		1,413 50	
Ogden, L. M.		570 00	
Oldschamp, R.		165 00	
Oliver, J. A. Disbursements		575 77	
Pigott, J. A.		1,430 00	
Poulin, C.		88 00	
Pritchard, Fred		410 00	
Regan, John		484 00	
Reid, J. P.		1,035 00	
Richardson, C. R.		645 00	
<i>Carried forward</i>		98,858 19	70 349 80

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		98,858 19	70 349 80
FOREST RANGING.—Concluded.			
Ridley, R.		1,575 75	
Ritchie, J. F.		925 00	
Ross, S.		1,498 50	
Ryan, James		1,147 00	
Schrieber, C. C.		539 00	
Shaw, Alfred	605 00		
Disbursements	15 00		
		620 00	
Shaw, D.		435 00	
Sharp, James		865 00	
Short, J.		500 00	
Simpson, Wm.		1,645 00	
Sissons, H. P.		320 00	
Smith, J. D. C.		745 00	
Spafford, Thos.		200 00	
Spavin, J.		1,130 00	
Spence, D.		1,721 50	
Stein, Paul		1,680 00	
Stevenson, A.		110 90	
Disbursements			
Stewart, D.	600 00		
Disbursements	7 00		
		607 00	
Thorpe, Thos.	987 00		
Disbursements	14 45		
		1,001 45	
Trowse, A. E.		599 50	
Urguhart, A.		990 00	
Vanderburg, N.		902 00	
Vincent, H. T.		1,853 50	
Warri, F.		52 00	
Watts, Fred		156 00	
Watts, J. J.		25 00	
Watts, Geo.		114 95	
Disbursements			
Whelan, P. J.	1,870 00		
Disbursements	137 90		
		2,007 90	
Whelan, P. M.		55 00	
Williams, P.		126 00	
Wilson, D.		920 00	
Wilson, Alex.		475 00	
Wood, W. G. A.		62 45	
Disbursements			
Wylie, B.		11 00	
Youmans, D.		55 25	
Young, R. J.		745 00	
Yuill, John		200 00	
			125,474 84
FIRE RANGING.			
Abbott, Wm.		378 50	
Abraham, M.		214 50	
Adams, A.		433 75	
Agnew, Wm.		173 25	
Alt, John		222 75	
Allen, R. A.	845 00		
Disbursements	348 76		
		1,193 76	
Allen, Wm.		418 00	
Ambridge, Wm.		60 00	
American Tent and Awning Co.,	Supplies	240 00	
Anderson, John		200 75	
<i>Carried forward</i>		3,535 26	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		3,535 26	195,824 64
FIRE RANGING.—Continued.			
Anderson, James		291 50	
Anderson, Robert		393 25	
Anger, T.		321 75	
Archambault, G.		409 75	
Arnott, T. W.		167 75	
Atkison, A. C.		286 00	
Aubee, T.		390 50	
Aymor, A. J.		302 50	
Babin, J.		225 00	
Baker, Wm.		390 50	
Baldwin, Steve		379 50	
Baldwin, Wm.		379 50	
Bandin, J.		16 50	
Banks, E.		230 25	
Barratt, J.		250 75	
Barrie, T.		420 75	
Barry, C.		404 25	
Bartlett, S.		192 50	
Barton, J.		393 25	
Bartrand, Wm.		341 00	
Baskin, L.		327 25	
Basso, A. N.		77 00	
Bates, R.		280 50	
Bauman, Theo.		341 00	
Beatty, W. A.		371 25	
Beatty, H.		7 00	
Beaudry, J.		354 75	
Beaudry, M.		382 25	
Beauvis, P.		379 50	
Beauvis, J.		379 50	
Bedard, J.		379 50	
Bedford, H.		397 75	
Bedford, O.		39 00	
Begin, A.		376 75	
Belcher, E. D.		400 50	
Bell, W.		55 00	
Bell, J.		376 75	
Bellefull, O.		393 25	
Beleveau, F.		342 75	
Belton, W. J.	387 75		
Disbursements	4 40		
		392 15	
Benard, D.		108 50	
Benson, M.		41 25	
Bergeron, Alf.		360 25	
Bernoche, G.		346 50	
Bernier, C.		379 50	
Bernier, Z.		338 25	
Bird, John		368 50	
Bisson, Art.		417 00	
Blair, H. L.		24 75	
Blanchette, H.		335 50	
Blaski, F.		396 00	
Bliss, L. E.	3,000 00		
Disbursements	1,632 21		
		4,632 21	
Blonaim, E.		38 50	
Blondin, A.		313 50	
Boiley, H.		514 25	
Bois, L.		393 25	
<i>Carried forward</i>		24,783 12	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>			
FIRE RANGING.—Continued.		24,783 12	195,824 64
Boissoneault, J.		398 75	
Boivin, J.		403 25	
Boldt, A.		382 25	
Bonathan, Wm.		415 25	
Bonsteel, H.		551 25	
Bookhout, H.		308 00	
Boucher, C.		453 75	
Boucher, S.		154 00	
Boucher, J.		184 25	
Bourke, P.		382 50	
Bourassa, E.		117 00	
Bowes, John		401 50	
Bowers, Geo.		376 75	
Bowland, J. J.	920 00		
Disbursements	1,121 26		
		2,041 26	
Bowles, J.		374 00	
Boyce, B.		382 25	
Boyes, N.		409 75	
Boyd, John		155 00	
Boyd, J.		302 50	
Bozalie, E.		101 75	
Brant, H.		272 25	
Brear, Geo.		393 25	
Bremer, C. E.		401 50	
Brennan, G.		368 50	
Brennan, R. L.		401 50	
Brensten, H.		154 00	
Bresenham, J.		349 25	
Brock, W. R., & Co. Supplies		2,313 86	
Bromley, E. H.	573 25		
Disbursements	177 05		
		750 30	
Bromley, J. C.		338 25	
Brooke, A. T.		178 75	
Brooks, Wesley		327 25	
Brown, E.		137 50	
Brown, T. E.		429 00	
Brown, J. F.		405 00	
Brown, A.		382 25	
Brown, August		368 50	
Brown, W.		431 75	
Brown, Wm.		77 00	
Brown, John		371 25	
Brown, H.		291 50	
Brown, W. C.		244 75	
Brum, A. W.	840 00		
Disbursements	722 10		
		1,562 10	
Bryant, W.		478 50	
Buckingham, J. P.		387 75	
Bull, W.		370 25	
Bull, W. H.		407 00	
Bulmer, A.		365 75	
Bunting, H. T.		379 50	
Burns, F.		359 25	
Burns, J.		88 00	
Butler, W. J.		170 50	
Cahoun, John		137 50	
Calder, Ed.		228 25	
<i>Carried forward</i>		47,399 64	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		47,399 64	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Cameron, N.		225 50	
Cameron, Jos.		247 50	
Cameron, Wm.		299 75	
Cameron, Archie		360 25	
Cameron, M. H.		393 25	
Cameron, J. K.	628 00		
Disbursements	14 35		
		642 35	
Campbell, S.		101 75	
Campbell, J.		313 50	
Campbell, J. R.		319 00	
Campbell, D.		433 75	
Campbell, W.		584 00	
Campbell, R.		406 00	
Campbell, A.		379 50	
Campbell, T. J.		305 25	
Campbell, K. W.		371 25	
Campbell, Thos.		415 25	
Campbell, Wesley		407 00	
Canadian Northern Express Co. Express		6 20	
Canadian Express Co. Express		4 12	
Canadian Pacific Railway Co. Freight charges		8 22	
Canadian Fairbanks-Morse Co. Equipment		4,108 54	
Caney, Thos.		85 25	
Canning, J.		387 75	
Canora, Jos.		316 25	
Carew, John, Lumber Co.		112 50	
Carino, F.		3 50	
Caron, F.		126 50	
Carlton, T.		381 25	
Carpenter, G. G.		382 25	
Carrier, E.		134 75	
Caswell, R.		379 50	
Caswell, S.		129 25	
Caswell, M.		258 50	
Cates, Jos.		382 25	
Cave, J. E.		19 25	
Chaffey, Wm.		390 50	
Chamberlain, H.		371 25	
Chambers, Thos.		401 50	
Chapman, John		280 50	
Chapman, C. N.		286 00	
Chappish, J.		280 50	
Charlebois, E.		38 50	
Charron, J.		470 25	
Chartrand, M.		123 75	
Chase, J. F.		396 00	
Chaundant, H.		121 00	
Chautal, Art.		5 50	
Chief, T.		173 25	
Chief, N.		159 50	
Chippier, M.		401 50	
Christianson, J.		23 50	
Clark, W. R.	815 00		
Disbursements	919 06		
		1,734 06	
Cleary, J. F.		88 25	
Clegg, R.		225 50	
Clegg, F.		141 00	
<i>Carried forward</i>		66,942 13	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		66,942 13	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Clergue, D.		154 00	
Cochrane, H.	396 00		
Disbursements	2 40		
		398 40	
Codere, H.		401 50	
Coghlan, T. E.		370 25	
Coghlan, Thos.		401 50	
Coghlan, J. S.		368 50	
Coleman, E. J.		403 25	
Conklin, Wm.		393 25	
Conroy, Ed.		324 50	
Conway, R.		401 50	
Conway, Thos.		374 00	
Conway, H.		379 50	
Cook, Geo.		4 00	
Cook, Wm.		379 50	
Cooney, Thos.		385 00	
Corps, A. C.		352 00	
Coshette, T.		44 00	
Cotte, H.		359 25	
Cottenham, Wm.		387 75	
Couorette, J.		418 00	
Cowan, J.		352 00	
Cox, Jos.		396 00	
Coyne, P.	268 00		
Disbursements	52 20		
		320 20	
Craig, John		385 00	
Crawford, John		706 50	
Cross, C. C.		173 25	
Cryer, P.		8 25	
Cuddy, J.		390 50	
Culbert, D. S.		367 50	
Culhane, Dan.		239 25	
Culhane, A.		299 75	
Culhane, D.		390 50	
Cullen, G. B.		211 75	
Cummer, W. T.		156 75	
Cummins, Thos.	308 00		
Disbursements	19 40		
		327 40	
Cummins, Frank		286 00	
Currie, T. A. G.		286 00	
Curtin, Dave		396 00	
Curtis, John		354 75	
Dagg, A.		173 25	
Dalman, J.		327 25	
Dambremont, F.		220 00	
Dancer, Geo.		123 75	
Dane, Alf.		396 00	
Darby, Wm.	915 00		
Disbursements	1,409 86		
		2,324 86	
Davidson, Ira		379 50	
Davidson, John		414 25	
Davies, A.		44 00	
Davis, Thos.		376 75	
Dawkins, J. J.	600 00		
Disbursements	130 78		
		730 78	
<i>Carried forward</i>		85,199 52	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		85,199 52	195,824 64
FIRE RANGING.—Continued.			
Dawson, Geo.		115 50	
DeLabarre, H.		368 00	
Dennie, F. J.	790 00		
Disbursements	342 14		
		1,132 14	
Dennison, H. J.		401 50	
Deschamp, F.		363 00	
Deschamp, J.		44 00	
Deschamp, P.		55 00	
Desjordina, W.		46 50	
Derouard, M.		396 00	
Derouin, James		379 50	
Derouin, A.		354 75	
Dery, Jos.		349 25	
Deschine, J.		332 75	
Desellier, P.		148 50	
Dewett, John		68 75	
Dickson, W. D.		401 50	
Dickson, J.		280 25	
Dixon, Geo.		101 75	
Dobie, T.		418 00	
Dodds, A.		341 00	
Dodge, Thos.		404 25	
Dominion Express Co. Express		18 18	
Domoulin, D.		73 50	
Domoulin, P.		33 00	
Donaldson, John		352 00	
Donaldson, C.		382 25	
Donis, P.		376 75	
Douchine, D.		231 00	
Douchine, S.		338 25	
Dougherty, Chas.		286 00	
Douglas, J. R.		203 75	
Douglas, D. B.		253 00	
Douglas, Thos.		371 25	
Dowadal, D.		365 75	
Dowd, H. L.		393 25	
Downey, Geo.		206 75	
Dowsett, R. E.		631 50	
Dubreuiel, A.		376 75	
Dubois, Wm.		343 75	
Ducharme, D.		360 25	
Dufoe, B.		210 50	
Dufresne, D.		233 75	
Duke, D.		348 25	
Duma, Alex.		385 00	
Dumont, A.		167 75	
Dumont, O.		374 00	
Dumont, P.		24 75	
Dunbar, James		393 25	
Duncan, R.		376 75	
Dunn, J.		371 25	
Dunning, J. R.		184 25	
Dupine, Hy.		420 75	
Dupuis, O.		393 25	
Dupuis, Ed.		187 00	
Duquette, Chas.		390 50	
Duquette, H.		379 50	
Duval, C. A.	1,284 00		
Disbursements	1,461 31		
		2,745 31	
<i>Carried forward</i>			
		104,884 15	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		104,884 15	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Edwards, W. C.		288 00	
Edwick, C. G.		390 50	
Elleston, R.		237 00	
Elliotte, C. H.		376 75	
Elliotte, J.		140 25	
Elliss, E. C.		433 13	
Ellsworth, C. B.		387 75	
Emery, J.		386 75	
Emes, Hugh		393 25	
Ennis, S.		324 50	
Espanoil, A.		294 25	
Evans, W. J.	980 00		
Disbursements	1,024 19		
		2,004 19	
Everett, L.		299 75	
Fairbairn, N. H.		343 75	
Falshaw, R.		404 25	
Farr, W. F.		224 00	
Faudette, J.		33 00	
Favelle, T. W.		96 25	
Favreau, Geo.		225 50	
Fecto, Geo.		415 25	
Ferand, Geo.		402 50	
Ferguson, A.		406 00	
Ferguson, E. A.		99 00	
Ferguson, T. H.	584 00		
Disbursements	3 69		
		587 69	
Ferguson, F.		390 50	
Ferguson, J.		403 25	
Ferris, R.		80 00	
Field, Wm.		308 00	
Filion, D.		291 50	
Filliatrault, J.		384 00	
Findley, Jas.		434 50	
Finlayson, J. L.		19 25	
Finlayson, J.		305 25	
Finlayson, J. H.		431 75	
Finlayson, D.		261 25	
Finn, J.		220 00	
Firby, L. C.		216 00	
Fisher, Geo.	765 00		
Disbursements	594 39		
		1,359 39	
Fitzgerald, Jas.		393 25	
Flaherty, John		387 75	
Flanagan, W. J.		108 00	
Fleming, F. L.	576 00		
Disbursements	82 05		
		658 05	
Fletcher, N. B.	620 00		
Disbursements	47 70		
		667 70	
Fletcher, A.		162 00	
Fleurie, Andy		354 75	
Flynn, Pat.		396 00	
Forman, A.		396 00	
Forster, A. T.		152 25	
<i>Carried forward</i>		122,857 80	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		122,857 80	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Fortin, J. T.		338 25	
Foster, F.		141 00	
Foster, R.		371 25	
Foucault, A.		363 00	
Fournier, J.		233 75	
Francois, J. S.		253 00	
Franklin, John		52 25	
Fraser, A.		376 75	
Fraser, W. A.		431 75	
Fraser, Chas.		63 25	
Frecette, B.		393 25	
Frenette, Leo		60 50	
French, Lorn		379 50	
Frith, A.		313 50	
Furlong, J.		401 50	
Gagne, F.	825 00		
Disbursements	688 94		
		1,513 94	
Gagnon, F.		192 50	
Gagnon, F.		297 00	
Gagnon, Alex.		396 00	
Gagnon, N.		401 50	
Gamble, J. H.		7 50	
Gamble, Wm.		134 75	
Gardner, S. H.		370 25	
Gartshore, M.		393 25	
Gaudaette, J.		318 00	
Gault, J.		382 25	
Gault, R.		382 25	
Gay, M. W.		13 80	
Gemmill, John	960 00		
Disbursements	527 06		
		1,487 06	
Genereux, S.		376 75	
Gerrard, T.		302 50	
Gervais, F. H.		382 25	
Gervais, F.		382 25	
Gervais, F.		386 75	
Gervais, Jos.		231 00	
Gibbons, O.		376 50	
Gibson, Ed.		393 25	
Gideon, Jos.		363 00	
Gideon, C.		222 75	
Giles, Chas.		7 00	
Godward, E.		380 25	
Gonge, H.		49 50	
Good, W. H.		104 50	
Good, J. R., Advertising Co.	Supplies	175 00	
Gordon, Alfred		390 50	
Gorman, D.		351 00	
Gosselin, Fred.		126 50	
Graham, C.		335 50	
Graham, J.		374 00	
Grand Trunk Railway Co.	Freight	1 06	
Granier, J.		314 50	
Grasser, G.		431 75	
Grawberger, Thos.		393 25	
Gray, Peter		401 50	
Great North Western Telegraph Co.		13 89	
<i>Carried forward</i>		140,587 05	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		140,587 05	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Green, W. T.		85 25	
Green, Malcolm		82 50	
Grills, S.		355 75	
Groome, L.		349 25	
Grotten, C. A.		140 00	
Groulx, A.		396 00	
Groulx, J.		445 50	
Groulx, A.		445 50	
Groulx, P.		396 00	
Groulx, Chas.		352 00	
Groutte, Dan.		49 50	
Grovers, Jno.		341 00	
Guess, Jos.		346 50	
Guetr, S.		134 75	
Gunderson, A.		376 75	
Gunter, R. H.		396 00	
Gunter, J.		376 75	
Guthrie, Wm.		396 00	
Guy, Fred.		66 00	
Hackenbroich, C.		302 50	
Hagen, C.		393 25	
Hagarty, J.		459 00	
Haggart, L.		94 50	
Haley, Ed.		407 00	
Hall, David		385 00	
Hall, Wm.		371 25	
Hall, John		426 25	
Hall, Thos.		170 50	
Hall, Wesley		387 75	
Halliday, Wm.		412 50	
Hamilton, J. W.		374 00	
Hamilton, Fred.	815 00		
Disbursements	539 57		
		1,354 57	
Hamilton, J.		379 50	
Hammond, W.		408 00	
Hamon, F.		434 50	
Hanbridge, Wm.		276 00	
Hand, Thos.	885 00		
Disbursements	530 47		
		1,415 47	
Hanrahan, D.	515 00		
Disbursements	519 85		
		1,034 85	
Hanson, A.		382 25	
Harkley, Jno.		390 50	
Harney, B.		371 00	
Harney, S.		371 00	
Harper, Wm.		393 25	
Harris, F.		55 00	
Harrison, Geo.		242 00	
Hartford, Wm.		29 20	
Harvie, A.		374 00	
Haskins, W.		407 00	
Hass, Geo.		396 00	
Hastings, J.		390 50	
Hawley, P.		368 50	
Hayes, C.		297 00	
<i>Carried forward</i>		160 071 64	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Carried forward</i>		160,071 64	195,824 64
FIRE RANGING.—Continued.			
Hayes, T.		176 00	
Hazard, Geo.		385 00	
Hazard, S. W.		236 50	
Head, W. J.		82 50	
Healy, H.		19 25	
Hebert, J. A.		276 75	
Hefferty, D.		5 50	
Heitman, R.		375 75	
Henderson, John		434 50	
Heney, Jos.		365 75	
Henry, M.		9 20	
Herron, A.		55 00	
Hey, Ben.	845 00		
Disbursements	346 80		
		1,191 80	
Hickey, J. L.	855 00		
Disbursements	644 90		
		1,499 90	
Higgins, John		352 00	
Hill, Chas.		349 25	
Hindson, C. E.	Disbursements	20 60	
Hines, E.		210 00	
Hoadley, John		341 00	
Hogan, C.		85 25	
Hogan, J. C.		310 75	
Hogan, P.		409 75	
Hogan, D.		310 75	
Holley, J.		162 25	
Hollingshead, A.		401 50	
Holm, O.		1 50	
Holmes, W. F.		242 00	
Holmes, J.		217 25	
Holt, Wm.		387 75	
Holst, A.		505 75	
Honeyford, W.		356 00	
Horn, A. G.		371 25	
Hornick, Geo.		429 00	
Horsman, H.		371 25	
Holte, J. D.		382 25	
Hubbell, E. S.		103 40	
Hubart, A. R.		288 00	
Hudson's Bay Co.		13 75	
Hume, O. B.		376 75	
Hunter, Wm.		401 50	
Hunter, E.		302 50	
Hunter, L. H.		343 75	
Hurdman, W. H.	615 00		
Disbursements	61 95		
		676 95	
Indian, F.		198 00	
Ireland, G. E.		328 25	
Irish, Wm.		475 50	
Irwin, T.		140 25	
Isaac, M.		141 00	
Isbister, J. A.		390 50	
Jacob, M.		217 25	
James, G.		390 50	
Jarvis, J.		16 50	
Jeneroux, N.		403 25	
<i>Carried forward</i>		176,609 74	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		176,609 74	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Jenkins, S.		1,470 00	
Jennings, Fred.		121 00	
Jewell, F.		379 50	
Jewell, E.		402 50	
Jocko, P.		407 00	
Johnson, Wm.		440 00	
Johnston, F. F.		415 25	
Johnston, F. C.		357 50	
Johnston, John		376 75	
Johnston, J. E.		255 75	
Johnston, W. A.		134 75	
Jolicour, J. P.		55 00	
Jones, T.		406 00	
Jones, Chas.		390 50	
Jones, W. T.		387 75	
Jones, W. M.		294 25	
Julian Sale Leather Goods Co.		14 50	
Keating, W.		404 25	
Keeley, C. A.		382 25	
Kellington, W. J.		272 25	
Kelly, R.		18 00	
Kelly, T.		376 75	
Kelly, John		390 50	
Kelly, Geo.		253 00	
Kelly, J.		79 75	
Kennedy, Robt.		376 75	
Kerby, John		379 50	
Kerby, John		264 00	
Kewais, J.		365 75	
Kickley, Wm.		393 25	
Kielty, Geo.		376 75	
Kilby, T.		368 50	
King, R.		393 25	
King's Printer .....Supplies		837 22	
Kingston, Thos. J.		379 50	
Kingston, Thos. H.		352 00	
Kirton, Wm.		390 50	
Kirtin, N.		516 00	
Kitchen, J.		341 00	
Kitchen, J.		393 25	
Kitcheban, J.		225 50	
Knott, J.		348 25	
Knox, D.		451 50	
Kowaskie, Chas.		41 00	
Krock, A.		390 50	
Labby, F.		55 00	
Labby, J.		85 25	
Labelle, D.		195 25	
Labelle, S.		382 25	
Labine, E.		250 25	
Labine, J.		341 00	
LaBrash, James		385 00	
Labree, P.		140 25	
Lacell, L.		379 50	
Lecleir, P.		192 00	
Lacleir, R.		192 00	
Lacroix, J.		204 00	
Lafond, J.		140 25	
Lafontain, J. D.		401 50	
<i>Carried forward</i>		196,021 96	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		196,021 96	195,824 64
<i>FIRE RANGING.—Continued.</i>			
LaGrow, Geo.		330 00	
Laidlaw, H.		313 50	
Lamey, Jos.		250 25	
Lamontague, P.		165 00	
Lamonrieux, A.		360 25	
Lance, F.		387 75	
Langford, T.		376 75	
Lanktree, J.		437 25	
Laplant, P.		379 50	
Laplonte, John		321 75	
Lapierre, P.		143 00	
Lapuline, J. J.		378 25	
Larwell, O.		401 50	
Laroque, J.		220 00	
Larson, C. G.		211 75	
Lascelle, Ed.		363 00	
Latour, L.		188 50	
Laturski, G.		250 25	
Laundry, P.		365 75	
Laundry, J.		360 25	
Laundry, D.	652 75		
Disbursements	285 40		
		938 15	
Lavalley, W.		337 00	
Lavigne, A.		363 00	
Lavesque, J.		398 75	
Lawrance, S.		420 75	
Lawson, Jas.		385 00	
Leach, R. H.		319 00	
Leamy, J.		85 25	
Leberge, J.	679 00		
Disbursements	368 45		
		1,047 45	
Leblance, O.	588 00		
Disbursements	166 52		
		754 52	
Lebianc, Wm.		341 00	
Leblanc, Walter		379 50	
Leblanc, J.		363 00	
LeClair, H.		330 00	
Lee, J. B.	795 00		
Disbursements	143 21		
		938 21	
Lee, C.		119 90	
Lee, T. F.		269 50	
Lefive, F.		393 25	
Legarie, A.		57 75	
Legriz, J.	Disbursement	2,344 00	
Legriz, H. M.		407 00	
Legriz, Thos.		407 00	
Lepenskie, Paul		393 25	
Leroy, Wm.		321 00	
Leroy, L.	825 00		
Disbursements	563 56		
		1,388 56	
Lerwill, R.		434 50	
Letourneau, E.		294 25	
Lewis, W. H.	Searches	26 05	
Liddicott, T.		17 50	
<i>Carried forward</i>		216,500 30	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		216,500 30	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Lidstone, J.		393 25	
Lipsett, Wm.		211 75	
Livingstone, J.		5 50	
Loney, John		401 50	
Lorimer, Jos.		55 00	
Loughlin, John		324 50	
Lovering, J. E.		379 50	
Ludgate, John		357 50	
Lumb, John		387 75	
Luty, John		129 25	
Lyons, R. B.		363 00	
Lyons, H.		343 75	
MacCrimdle, I.		349 02	
Machimitay, J.		203 50	
MacLeod, R.		280 50	
MacMillan, D. H.		5 50	
Madon, J. B.		343 75	
Maloy, T.		420 75	
Malowney, W. H.		376 75	
Mann, J.		367 00	
Mann, R. A.	280 00		
Disbursements	127 75		
		407 75	
Manawasin, P.		385 00	
Manioque, M.		396 00	
Marceau, P.		379 50	
Marchand, L.		291 50	
Martin, E.		253 00	
Martin, R.		378 25	
Martin, S.		378 25	
Martin, T.		387 75	
Mason, Geo.		341 00	
Matchener, Wm.		324 50	
Matheson, R.		379 50	
Matt, A.		12 00	
May, H.	830 00		
Disbursements	1,661 65		
		2,491 65	
Meagher, Geo.		397 75	
Mebes, A.		374 00	
Menard, E.		85 25	
Menard, H.		393 25	
Merchant, John		192 50	
Merkley, J. C.		41 00	
Michie, A.		379 50	
Micholson, J.		189 75	
Middlebrook, J. N.		393 25	
Miller, James		48 85	
Milway, J. H.	957 00		
Disbursements	1,549 39		
		2,506 39	
Misservier, T.		379 50	
Mitchell, P.		418 00	
Moffatt, Jos.		393 25	
Moir, Alex.		382 25	
Molyneaux, Geo.		400 00	
Mongose, A.		250 25	
Montgomery, R.		217 00	
Montgomery, S.		30 25	
<i>Carried forward</i>		236,476 86	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		236,476 86	195,824 64
FIRE RANGING.—Continued.			
Montreuil, E.		360 25	
Montreuil, J. J.		365 75	
Montreuil, L.		379 50	
Moody, H. C.		275 00	
Moore, J. V.		434 50	
Moore, P.		74 25	
Moore, A.		196 25	
Moore, W.		337 00	
Morgan, Geo.	580 00		
Disbursements	93 00		
		673 00	
Morin, J.		376 75	
Morin, Jos.		327 25	
Morin, J. E.		390 50	
Morin, D.		129 25	
Morin, L.		151 25	
Mosseau, T.		242 00	
Mosseau, G.		115 50	
Mullette, S.		346 50	
Mullin, D. R.		382 25	
Mullin, A. E.		63 00	
Mullin, J.		6 00	
Muggaberry, T.		148 50	
Munroe, Wm.		382 25	
Munson, J.		22 50	
Murray, Thos.		434 50	
Musquatish, H.		387 75	
McAdam, Jas.		429 00	
McAra, H.		132 00	
McAulay, W. D.	75 00		
Disbursements	16 75		
		91 75	
McBain, R.		393 25	
McCall, H. E.		387 75	
McCarthy, J.		368 50	
McCaw, Wesley	576 00		
Disbursements	298 51		
		874 51	
McCaw, M.		187 00	
McClure, Wm.		393 25	
McCool, F.		308 00	
McCormick, T.		418 00	
McCoy, C. L.		434 50	
McCready, M.		393 50	
McCulloch, T.		332 75	
McCurrah, J.		41 25	
McDonald, A. J.	1,800 63		
Disbursements	491 00		
		2,291 63	
McDonald, H. F.		418 00	
McDonald, J. R.		415 25	
McDonald, T.		619 00	
McDonald, D. R.		378 25	
McDonald, Wm.		63 25	
McDonald, John		379 50	
McDonald, Wm.		370 25	
McDonald, M.		209 00	
McDonald, Howard		376 75	
<i>Carried forward</i>		254,184 00	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		254,184 00	195,824 64
<i>FIRE RANGING.—Continued.</i>			
McDonald, Neil		225 50	
McDonell, L. P.		376 75	
McDougall, C.	568 00		
Disbursements	4 80		
		572 80	
McFarland, J.		379 50	
McFarlane, Wm.		376 75	
McGarvey, P.		398 75	
McGhee, Chas.		387 75	
McGown, T.	895 00		
Disbursements	1,375 57		
		2,270 57	
McGregor, W. H.	865 00		
Disbursements	630 83		
		1,495 83	
McGregor, J. A.		382 25	
McKechnie, J. A.	970 00		
Disbursements	2,782 54		
		3,752 54	
McKendry, W. B.		379 50	
McKee, T.		379 50	
McKee, T. E.		379 50	
McKenna, P.		310 75	
McKenzie, J.		393 25	
McKenzie, R.		363 00	
McKibbon, J. W.		382 50	
McKinley, J. W.		595 00	
McKinley, A.		299 75	
McKinnon, Thos.		379 50	
McKnight, H.		85 25	
McLaren, J.		412 50	
McLean, C. O.	716 00		
Disbursements	48 55		
		764 55	
McLean, Jas.		444 50	
McLean, Donald		18 00	
McLellan, A.		126 50	
McLellan, B.		341 00	
McLeod, B.		362 00	
McLeod, P.		362 00	
McLeod, J.		319 00	
McLeod, J.		568 00	
McMahon, A.		407 00	
McNally, B.		631 50	
McNee, E.		389 50	
McNee, Geo.		389 50	
McNeill, J. A.		379 50	
McPhail, L. L.		126 50	
McPhee and Gardiner		6 00	
McPherson, J.		49 50	
McQuan, C. R.		310 75	
McSorley, W. J.		222 75	
Nadeau, G.		270 00	
Nairn, A. T.		85 25	
Neegan, J.		121 00	
Neep, P.		382 25	
Neill, J.		437 25	
Nelson, A.		22 50	
Nelson, Nels		412 50	
<i>Carried forward</i>		277,111 79	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		277,111 79	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Nevison, W. H. Disbursements..	608 00		
Disbursements	10 50		
Newman, E.		618 50	
Newman, P.		517 00	
Nicol, Alf.		354 75	
Nicholas, Wm.		531 50	
Nicholson, W.		379 50	
Niddery, R.		134 75	
Noel, A.		242 00	
Nolan, Chas.		213 75	
Norton, W. A.		335 00	
Norris, R.		397 75	
O'Bain, N.		63 25	
O'Brian, D.		178 75	
O'Brien, P.		376 75	
O'Connor, W.		412 50	
Odfeck, J.		371 25	
O'Donnell, J.		401 50	
O Grady, M.		376 75	
O'Grady, E. N.		390 50	
O'Litt, A.		327 25	
O'Neil, F.		145 00	
Oulette, A.		375 75	
Ouellette, A.		222 75	
Packham, C. J.		374 00	
Page, Fred.		379 50	
Paquette, John		371 25	
Paquette, Paul		387 75	
Parent, J.		349 25	
Parker, L. H.		385 75	
Parker, A.		346 50	
Parker, C.		404 25	
Parker, S.		195 25	
Parkdale Motors Motors..		173 25	
Parkhurst, J.		3,915 25	
Passmore, T. A.		387 75	
Pegg, W. R.		294 25	
Pellerine, E.		291 00	
Pelletier, C.		393 25	
Pelotte, J. B.		382 25	
Pellow, C.		453 75	
Penitoché, M.		335 50	
Perrault, E.		320 00	
Peters, Geo.	815 00	420 75	
Disbursements	753 44		
Peters, J.		1,568 44	
Peterson, O.		305 25	
Picard, F.		330 00	
Pickering, E.		93 50	
Picott, James		151 25	
Peerce, C.		321 75	
Pierce, Thos.		234 00	
Pierce, Thos.		396 00	
Pierrot, W.		390 50	
Pigeon, C.		382 25	
Pingle, A.		390 50	
Pinnette, Jos.		170 50	
		353 75	
<i>Carried forward</i>		300,174 48	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		300,174 48	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Pollock, R.		403 25	
Poole, E. G.	1,675 00		
Disbursements	6,480 16		
		8,155 16	
Porteous, Wm.		379 50	
Post, J. A.		371 25	
Poulin, G.		319 00	
Powell, John		101 75	
Powell, M.		101 75	
Prange, L.		390 50	
Prentice, John		387 75	
Prestley, James		604 00	
Prestley, J.		409 75	
Pritchard, F.		704 00	
Quachazesick, J.		291 50	
Quibell, G.		371 25	
Quinn, Harry		145 75	
Quinn, J. J.		390 50	
Rabbitts, Max	640 00		
Disbursements	236 75		
		876 75	
Raciott, L.		336 25	
Racine, A.		329 00	
Ranson, Fred		365 75	
Redden, M. A.		379 50	
Regan, J. A. M.		401 50	
Reid, C. F.	384 00		
Disbursements	8 65		
		392 65	
Reid, H.		151 25	
Reilly, Wm.		19 25	
Reno, Nels		409 75	
Revell, L. O.	1,122 00		
Disbursements	1,090 46		
		2,212 46	
Reynolds, W. A.		189 00	
Reynolds, W. J.		5 50	
Reynold, J.	580 00		
Disbursements	107 30		
		687 30	
Richard, J.		85 25	
Richard, H.		404 25	
Richmond, W. A.		385 00	
Robb, James		343 75	
Robert, J.		236 50	
Robertson, J. A.		418 00	
Robertson, F.		39 00	
Robillard, A.		345 50	
Robinson, N. J.		11 00	
Robinson, J. B.		408 75	
Robinson, Moses		387 75	
Robinson, Wm.		247 50	
Robinson, S.		10 50	
Robinson, A.		91 00	
Rodgers, W. J.		324 50	
Rolph, Clark, Stone, Limited		618 45	
Rondan, A.		134 00	
Ross, A. C.		393 25	
Rowe, James		247 50	
<i>Carried forward</i>		325,588 50	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		325,588 50	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Ruddy, E. L. Co., Ltd., .....Supplies..		1,067 61	
Ruddy, Thos.		404 25	
Rudolph, L.		407 00	
Russell, Frank		9 00	
Ryan, W. H.		401 50	
Sadlo, J.		151 25	
Saums, F. E.		187 00	
Saunders, A.		261 25	
Sawdo, M.		85 25	
Sawyer, R.		387 75	
Sawyer, N.		382 25	
Scarlet, Ed.		46 75	
Scott, R.	492 00		
Disbursements	242 12		
		734 12	
Scott, F. A.		372 25	
Scott, F. E.		338 25	
Scott, H.		437 25	
Scythes and Co., Ltd.		153 75	
Sells, P. C.		412 50	
Semnard, E.		401 50	
Sharpe, James		354 75	
Shaw, H.		107 25	
Sheehan, D. J.		275 00	
Sheehan, Dan		379 50	
Sheesheegiven, S.		171 00	
Shields, J.		35 75	
Shields, H.	560 00		
Disbursements	71 45		
		631 45	
Shields, Ed.		6 00	
Sherfield, W. C.		121 00	
Shultz, F.		178 75	
Simmers, J. W.		390 50	
Simpson, M.		393 25	
Sinclair, D.		403 25	
Sing, S.		235 50	
Sing, W. H.	422 00		
Launch	1,200 00		
		1,622 00	
Singleton, J.		143 00	
Skully, Wm.		324 50	
Small, M. A.		115 50	
Smailes, G. R.		348 25	
Smellie, J.		387 75	
Smith, V.		704 00	
Smith, J. D. C.		560 00	
Smith, D.		403 25	
Smith, A.		397 75	
Smith, J. B.		356 00	
Smith, T. D.		382 25	
Smith, D.		348 25	
Smith, J.		253 00	
Smith, John		354 75	
Smith, J. H.		382 25	
Smith, Leslie		393 25	
Smith, Jos.		393 25	
Smith, M.		192 50	
Smyth, John		429 00	
<i>Carried Forward</i>		344,402 43	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		344,402 43	195,824 64
FIRE RANGING.—Continued.			
Snaith, W. J.		387 75	
Snyder, F.		379 50	
Sonseise, P.		211 75	
Soulier, W.		379 50	
Spears, W. J.		107 00	
Spence, H.		68 75	
Spillett, J. J.		396 00	
Spillett, P. L.		437 25	
Spreadborough, N.		385 00	
Spreadborough, W.		379 50	
Staniforth, B.		379 50	
St. Lawrence, A.		272 25	
St. Mary, O.		49 50	
Steer, H.		228 25	
Stephens, R. W.		363 00	
Stevenson, J. W.		244 75	
Stewart, W.		209 00	
Stewart, B.		123 75	
Stewart, T.		324 50	
Stewart, J.		382 25	
Stewart, A.		403 25	
Stewart, J. D.		407 00	
Stewart, E. B.		401 50	
Stickanbee, P.		71 50	
Stirling, Alex.		2,878 97	
Stone, Lee		360 25	
Stopes, F.		330 00	
Stover, R.		338 25	
Strange, B.		418 00	
Stratton, R.		404 25	
Stringer, K.		143 00	
Sringer, B.		451 50	
Strutt, A.		88 00	
Sudds, D.		379 50	
Sullivan, M.		365 75	
Sullivan, M.		178 75	
Sutherland, Dave		216 00	
Sutherland, J. W.		431 75	
Swanson, G.		385 00	
Sweeney, L.		233 75	
Sweeney, J.		30 25	
Sword, D.		27 50	
Tabbert, H.		107 25	
Tackney, Thos.	815 00		
Disbursements	547 32		
		1,362 32	
Tait, A.		390 50	
Tait, J.		390 50	
Tallon, M.		297 00	
Tang, J.		376 75	
Tarling, C., Map Co. Maps		43 15	
Taylor, S.		85 25	
Taylor, John		308 00	
T. and N. O. Ry. Rent		40 00	
Teasdale, J.		170 50	
Tenzies, Wm.		305 25	
Terrien, Geo.		222 75	
Thibb, Elf		430 75	
Thomas, H.		216 00	
<i>Carried forward</i>		363,800 87	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		363,800 87	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Thomas, W.		79 75	
Thomson, W. H.		379 50	
Thomson, Fred		409 75	
Thomson, John		412 50	
Thompson, J. W.		195 25	
Thompson, H. B.		156 00	
Tichborne, A.		616 00	
Tomilson, C.		376 75	
Toomer, S.		381 25	
Toutit, John		203 50	
Townsend, W.		52 25	
Townsend, J. E.		318 00	
Tremblay, E.		96 25	
Tremblay, E.		371 25	
Tripp, E. C.	648 00		
Disbursements	229 65		
		877 05	
Trowse, Alf.	536 00		
Disbursements	213 80		
		749 80	
Tryon, W.		379 50	
Tucker, Wm.		371 25	
Turcott, L.		401 50	
Turcott, J.		348 00	
Turner, J. J. and Sons, Ltd.		821 54	
Tyson, John		379 50	
Urquhart, A.	860 00		
Disbursements	820 34		
		1,680 34	
Valliant, G.		170 50	
Van Dorp, C.		55 00	
Veley, Wm.		167 75	
Velniff, Ed.		387 75	
Vincent, Thos.		327 25	
Visseau, Louis		376 75	
Vollick, C.		101 75	
Walder, W.		16 50	
Walker, Ed.		210 00	
Walker, R.		418 00	
Walker, Geo.		434 50	
Wallingford, M. F.		381 25	
Walmsley, H. H.		173 25	
Walsh, Isaac		379 50	
Ward, D.	640 00		
Disbursements	131 81		
		771 81	
Ward, J.		617 50	
Warner, J. S.		433 50	
Warren, D. L.		73 50	
Watson, Geo.		393 25	
Watters, A. M.		371 25	
Watts, Geo. Rent.		90 00	
Waugh, C. A.		332 75	
Weatherill, P.		46 75	
Weiler, C.		420 75	
Weir, Geo.		376 75	
Welsh, Jas.		379 50	
Western Forestry and Conservation Association, Supplies		24 38	
<i>Carried forward</i>		381,788 79	195,824 64

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.
<i>Brought forward</i>	381,788	79	195,824	64
FIRE RANGING.—Concluded.				
Whims, John	604	00		
Disbursements	76	30		
			680	30
White, A.			8	25
White, J.			396	00
Whitmore, D.			396	00
Whyte, J. A.			393	25
Wickens, H.			382	25
Wilkes, L.			57	75
Williams, S.			209	00
Williams, R. N.			110	00
Wilson, J. H.			371	25
Wilson, Frank			376	75
Wilson, James			407	00
Wilson, H.			79	75
Wilson, John			387	75
Wilson, B.			291	50
Wilson, D.	850	00		
Disbursements	1,170	94		
			2,020	94
Wisted, J.			167	75
Witherspoon, J.			63	25
Witzel, W. J.			319	00
Wood, J. E.			396	00
Woodcock, Geo.	584	00		
Disbursements	65	35		
			649	35
Woods, Wm.			390	50
Woods, T. J.	930	00		
Disbursements	802	92		
			1,732	92
Wright, J. S.			376	75
Wright, C.			352	00
Wright, Wm.			110	00
Wright, E.			354	75
Wynne, P.			420	75
Youmans, A.			354	75
Young, John			346	50
Young, Wm.			385	00
Young, M.			9	10
FOREST RESERVES, \$394,784.40.			394,784	90
<i>Temagami Reserve, \$48,009.52.</i>				
Baker, Wm.			398	75
Baptiste, John			8	25
Barrett, Thos.			510	00
Becker, O.			299	75
Bell, John			189	75
Bernard, B.			192	50
Black, G.			371	25
Blackwell, J. J.			165	00
Blanchett, J.			244	75
Bonhomme, L.			162	25
Both, W.			484	25
Bowland, A.			324	50
Boyd, W. R.			365	75
Bracken, R.			393	25
<i>Carried forward</i>	4,110	00	590,609	54

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		4,110 00	590,609 54
FOREST RESERVES.— <i>Continued.</i>			
<i>Tcmagami Reserve.—Continued.</i>			
Burden, John	840 00		
Disbursements	640 63		
		1,480 63	
Buchill, S. E.		319 00	
Cahill, B.		220 00	
Cameron, W. J.		407 00	
Campbell, J. M.	548 00		
Disbursements	189 05		
		737 05	
Carleton, Geo.		79 75	
Caswell, G.		211 75	
Caswell, E.		159 50	
Champlan, P.		63 25	
Chatson, F. C.		418 00	
Clarey, G.		357 50	
Clifford, John		324 50	
Coghill, J. M.	524 00		
Disbursements	99 50		
		623 50	
Connors, L.		246 00	
Connors, Thos.		379 50	
Coombes, W. C.		255 75	
Cooper, T.	1,009 75		
Disbursements	82 90		
		1,092 65	
Cowper, J. W.		354 75	
Crocker, K. J.		393 25	
Daynard, W. B.		154 00	
Desmureau, P.		365 75	
Didier, H.	825 00		
Disbursements	1,154 00		
		1,979 00	
Doherty, W.		198 00	
Downey, F.		228 25	
Ellingsworth, W.		151 25	
Ferris, R.		20 60	
Freve, A.		349 25	
Gale, W. J.		211 75	
Galer, R. B.		143 00	
Girard, S.		112 75	
Gray, Wm.		71 50	
Grendrod, S.		222 75	
Grenier, J.		66 00	
Guyott, J.		57 75	
Hamilton, H.		225 50	
Harper, T.		390 50	
Harrison, J. W.		958 50	
Hartley, Mark		412 50	
Hartt, I. B.	528 00		
Disbursements	120 55		
		648 55	
Heggarty, L. E.		136 50	
Henry, R.		57 50	
Hindson, C. E.	1,625 00		
Disbursements	1,394 60		
		3,019 60	
Hindson, M.		175 00	
<i>Carried forward</i>		22,589 08	590,609 54

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		22,589 08	590,609 54
FOREST RESERVES.— <i>Continued.</i>			
<i>Temagami Reserve—Continued.</i>			
Jacob, S. B.		24 75	
Jadouin, J.		46 75	
Jadouin, E.		46 75	
Jones, F.		225 50	
Kellie, J. D.		357 50	
Kettlewell, D. W.		368 50	
King, R.		93 50	
King, E.		71 50	
King, J.		16 50	
Kingsley, Ben.		173 25	
Lamarche, A.		20 00	
Lamarche, R.		20 00	
Lapierriere, A. P.		291 50	
Laronde, Jos.		280 50	
Laronde, John.		280 50	
Lavoie, X.		374 00	
Lindsay, G. C.		382 25	
Little, R.		22 00	
Longeuin, A.		316 25	
Longeuin, L.		184 25	
Loyt, A.		321 75	
Luke, J.		66 00	
Mannly, H.		63 25	
MicMac, S.		16 50	
Mildure, F.		200 75	
Millichamp, T.		107 25	
Minard, A.		110 00	
Moriarity, M.		343 75	
Morin, J.		376 75	
Moore, D.		101 75	
Morrison, J.		355 00	
Murphy, J.		299 75	
Murphy, James		294 25	
McDonald, J. C.		250 25	
McDermott, Alex.		407 00	
McFayden, James	628 00		
Disbursements	176 25		
		804 25	
McGuire, M.		374 00	
McHuguen, John.		206 25	
McIntyre, James		363 00	
McKechnie, A.		349 25	
McKenzie, T.		302 50	
McKenzie, C.		82 00	
McLean, W.		231 00	
McLeish, W. J.		426 25	
McLeish, Wm.		82 50	
McMahon, P.		205 00	
McMullin, Wm.		297 00	
McNally, Jos.		305 25	
Naveau, James		90 75	
Naveau, Thos.		308 00	
Naveau, R.		167 75	
Obrey, J.		71 50	
Ogden, F.		258 50	
Olsen, T.		68 75	
Ostrander, A. E.		198 00	
<i>Carried forward</i>		34,690 33	590,609 54

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		34,690 33	590,609 54
<i>FOREST RESERVES.—Continued.</i>			
<i>Temagami Reserve.—Concluded.</i>			
Pacquette, A.		269 50	
Page, A.		46 75	
Parent, B.		358 25	
Patterson, F. D. N.		115 50	
Perrault, Fred.		275 00	
Perrault, Wm.		277 75	
Petrant, W.		291 50	
Phillips, A. G. R.		244 75	
Pirie, J. B.		382 25	
Plaunt, Noel		305 25	
Puffer, D. S.		308 00	
Purdy, J.		228 25	
Rachine, J.		244 75	
Rastoule, F.		101 75	
Reesor, Geo. O.	576 25		
Disbursements	90 20		
		666 45	
Regan, D.		209 00	
Reilly, John		379 50	
Richardson, R.		379 50	
Ross, J. W.		313 50	
Ross, A.		313 50	
Roy, Thos.		374 00	
Sage, P.		361 75	
Simore, D.		104 50	
Stata, S.		352 00	
Steepe, E.		236 50	
Stoner, R.		275 00	
Tongue, S.		308 00	
Tooke, S.		258 50	
Towers, R.		247 50	
Trothier, John		258 50	
Tuer, Wm.		231 00	
Turner, Joseph		349 25	
Tyrell, J. A.		244 75	
Viverais, M.		286 00	
Walker, James		409 75	
White, J.		363 00	
Whitebear, F.		33 00	
Wilcox, E. P.		360 25	
Williams, A.		79 75	
Wilmer, S.		110 00	
Wilson, Alex.		376 75	
Young, R. J.	860 00		
Disbursements	930 74		
		1,790 74	
Young, J.		198 00	
<i>Mississaga Reserve, \$24,454.34.</i>			
Abbey, Chas.		253 00	
Acheson, L.	840 00		
Disbursements	1,295 39		
		2,135 39	
Backer, C.		57 75	
Belaney, A.		394 25	
Belledeau, Geo.		55 00	
<i>Carried forward</i>		50,904 91	590,609 54

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		50,904 91	590,609 54
<i>FOREST RESERVES.—Continued.</i>			
<i>Mississaga Reserve.—Continued.</i>			
Bennett, H.		228 25	
Boughman, A. M.		324 50	
Buisson, Wm.		376 75	
Cade, H.		178 75	
Carlson, F.		412 50	
Carpenter, R. J.	620 00		
Disbursements	236 35		
		856 35	
Causley, B.		409 75	
Catt, Wm.		44 00	
Champeux, H.		376 75	
Chartrand, T.		385 00	
Checkley, E.		280 50	
Cloute, Geo.		420 75	
Cloutier, H.		341 00	
Collins, N.		396 00	
Cousineau, M.		247 50	
Davidson, R. W.		382 25	
Davidson, R.		382 25	
Desbrian, F.		85 25	
Duval, C. A. Disbursements		1,250 00	
Ecker, C. M.		407 00	
Egan, D.		371 25	
Godson, H.	613 75		
Disbursements	136 65		
		750 40	
Gray, E. J.		258 50	
Groulx, E.		261 25	
Hillman, John		283 25	
Howard, Wm.		140 25	
Huckson, A. H. Disbursements		5 80	
Hussey, L.		396 00	
Jackpine, S.		110 00	
Jean, A.		620 00	
Jiguer, J.		228 25	
Jones, John		412 50	
Laundry, Alex.		233 75	
Leblanc, Lorne		420 75	
Legacy, F.		390 50	
Leveille, Frank		239 25	
Loosemore, S.		393 25	
Managness, J.		162 25	
Managness, M.		162 25	
Martin, J.		341 00	
Metooenese, Alex.		165 00	
Michel, John		181 50	
Miller, M.		140 25	
Miller, H.		140 25	
Moss, C.		93 50	
Murray, John		409 75	
McAllister, A. J.		387 75	
McAuley, Alex.		57 75	
McGrath, B.		335 50	
McIlmoyle, W.		409 75	
Nicholas, Herbert	560 00		
Disbursements	225 90		
		785 90	
<i>Carried forward</i>		67,977 36	590,609 54

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		67,977 36	590,609 54
<i>FOREST RESERVES.—Continued.</i>			
<i>Mississauga Reserve.—Concluded.</i>			
O'Donnell, James		19 25	
Orange, Wm.		382 25	
Otter, B.		88 00	
Panter, A.		112 75	
Phillion, M.		368 50	
Reid, James		409 75	
Ruttledge, J.		283 25	
Sailor, H.		222 75	
Sailor, D.		151 25	
Seeley, S.		371 25	
Shawabik, P.		173 25	
Shawabik, S.		173 25	
Smith, J.		280 50	
Smith, Thos.		178 75	
Snooks, Geo.		49 50	
Spaniel, James		260 25	
St. Laurent, J.		126 00	
Tierney, T.		198 00	
Turner, S.		247 50	
Ugongin, Chas.		126 50	
Valen, L.		55 00	
Valois, A.		151 25	
Vice, L.		57 75	
<i>Nepigon Reserve, \$23,457.35.</i>			
Andercourt, A.		44 00	
Barker, A.		426 50	
Bouchard, J.		700 50	
Bouchard, M.		266 75	
Bouchard, W.		490 87	
Bouchard, D.		12 37	
Braggan, Wm.		363 00	
Cummins, T. A.	580 00		
Disbursements	1,644 53		
		2,224 53	
DeLaronde, J.		107 25	
Desmoulin, J.		1 37	
Donio, J.		363 00	
Donley, J. P.		387 75	
Erkkila, S.		30 00	
Esquaga, Louis		137 50	
Fitzback, J.		619 50	
Goodchild, Louis		266 75	
Halme, O.		24 00	
Jokila, N.		273 00	
Kerr, D. W.		453 75	
King, S.		291 50	
Lagard, A.		145 75	
Leo, Chas.		110 00	
Lofquist, M.		363 00	
Maki, J.		285 00	
Memo, J.		154 00	
Michael, S.		346 50	
Michael, A.		302 50	
Michael, R.		211 75	
Micholson, J.		586 25	
<i>Carried forward</i>		82,452 50	590,609 54

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		82,452 50	590,609 54
FOREST RESERVES.— <i>Continued.</i>			
<i>Nepigon Reserve.—Concluded.</i>			
Micholson, Geo.		253 00	
Moose, P.		134 75	
Moose, Harry		231 00	
Morriseau, Fred.		457 87	
Morriseau, D.		143 00	
McDonald, M. D.		44 00	
McLeod, E. H.	1,135 00		
Disbursements	3,025 74		
		4,160 74	
Nance, Thos.		346 50	
Nemo, A.		151 25	
Netemegesic, F.		365 75	
Nicholson, Chas.		129 25	
Odawa, J.		470 25	
Ojitime, S.		365 75	
Oskopeda, J.		363 00	
Perkins, A. J.		823 50	
Poile, J.		253 00	
Poile, T.		451 00	
Poile, John		363 00	
Robinson, Peter		137 50	
Robinson, A.		145 75	
Shabawaykesick, A.		200 75	
Sponge, Wm.		363 00	
Thomson, J. G.		612 00	
Thomson, J.		143 00	
Thompson, Joseph		24 75	
Torrance, E. A.		379 50	
Walker, H.		382 25	
Ward, James		393 25	
Willan, Wm.	739 25		
Disbursements	6 60		
		745 85	
Young, J. J.		434 50	
<i>Eastern Reserve, \$3,424.13.</i>			
Bander, Wm.		401 50	
Bishop, H.		401 50	
Breen, James		401 50	
Gilmour, Ed.		162 25	
Hughes, Geo.		401 50	
Laundry, A.		401 50	
Lloyd, C.		233 75	
Myers, John		400 00	
Tapping, Thos.	600 00		
Disbursements	20 63		
		620 63	
<i>Sibley Reserve, \$100.00.</i>			
Oliver, J. A.		100 00	
			99,445 34
CULLERS' ACT.			
McDougall, J. T. Disbursements		6 00	
Green, Wm.	12 00		
Disbursements	3 10		
		15 10	21 10
<i>Carried forward</i>			690,075 98

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>			690,075 98
REFORESTRATION.			
Bell Telephone Company		33 60	
Supplies		2,213 30	
Labor		5,903 57	
Sundries		544 13	
			8,694 60
MINES AND MINING.			
Miller, W. G., Provincial Geologist, services	5,000 00		
Disbursements	226 76		
		5,226 76	
Knight, C. D., 1st Assistant Geologist, services..	2,500 00		
Disbursements	1,465 74		
		3,965 74	
Burrows, A. G., 2nd Assistant Geologist, services.	2,350 00		
Disbursements	610 85		
		2,960 85	
Hopkins, P. E., 3rd Assistant Geologist, services.	1,900 00		
Disbursements	1,575 06		
		3,475 06	
Rogers, W. R., Topographer, services	2,000 00		
Disbursements	64 24		
		2,064 24	
Bell, W. J., Cartographer, services		1,700 00	
Mickle, G. R., Mine Assessor, services	4,200 00		
Disbursements	303 82		
		4,503 82	
Godson, T. E., Mining Commissioner, services ...	4,500 00		
Morris, W. H., Mining Commissioner's Clerk			
services	1,700 00		
White, Miss N., Stenographer	772 17		
Disbursements	1,078 10		
		8,050 27	
Sutherland, T. F., Chief Inspector of Mines,			
services	3,300 00		
Disbursements	1,386 95		
		4,686 95	
Collins, E. A., 1st Assistant Inspector of Mines,			
services	3,000 00		
Disbursements,	1,131 62		
		4,131 62	
McMillan, J. G., 2nd Assistant Inspector of Mines,			
services		2,270 00	
Bartlett, J., 3rd Assitant Inspector of Mines,			
services		2,270 00	
Stovel, J. H., 4th Assistant Inspector of Mines,			
services, for four months. Resigned	1,000 00		
Disbursements	320 67		
		1,320 67	
Webster, A. R., 4th Assistant Inspector of Mines,			
services, for five months	1,250 00		
Disbursements	434 50		
		1,684 50	
Jackson, P. A., Surveyor, services		1,500 00	
McArthur, T. A., Inspector of Recorders' Offices,			
services	800 00		
Disbursements	466 40		
		1,266 40	
<i>Carried forward</i>		51,076 88	698,770 58

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		51,076 88	698,770 58
<i>MINES AND MINING.—Concluded.</i>			
Beno, J. W., services	659 29		
Disbursements	447 46		
		1,106 75	
Clarke, C. J. ....Disbursements		14 20	
Crompton, R. B., services		120 00	
Davidson, John F., services		60 00	
Drury, Prof. C. W., services		150 00	
Estlin, E. S., services	2,042 31		
Disbursements	1,127 38		
		3,169 69	
Easton, M., services		94 23	
Kerr-Lawson, D. E., services		70 00	
Ledoux, Prof. A., services	484 61		
Disbursements	539 58		
		1,024 19	
McKechnie, A. B., services		70 00	
Near, A. E., services	859 29		
Disbursements	158 10		
		1,017 39	
Parsons, Prof. A. L., services	502 31		
Disbursements	598 60		
		1,100 91	
Scott, John, services	859 29		
Disbursements	304 65		
		1,163 94	
King's Printer		448 76	
Express		12 70	
Telegraphing		64 05	
Typewriter repairs, etc.		16 00	
Sundries		23 03	
			60,802 72
<i>RESEARCH WORK.</i>			
Clarke, A. L., services			1,166 00
<i>MINING RECORDERS.</i>			
Browning, A. J., Recorder	600 00		
Morgan, M. R., Assistant	83 00		
Loudon, W. E., Clerk	492 31		
Boyer, P. H., Clerk	75 00		
Disbursements	275 83		
		1,526 14	
Campbell, C. A., Recorder	1,138 41		
Shanahan, Miss M., Stenographer	362 70		
Disbursements	349 75		
		1,850 86	
Gauthier, G. H., Recorder	1,500 00		
O'Brien, J. D., Clerk	1,120 00		
Loudon, W. E., Clerk	134 62		
Disbursements	881 38		
		3,636 00	
Hough, J. A., Recorder	1,400 00		
Ginn, H. G., Clerk	1,074 65		
Loudon, W. E., Clerk	376 92		
Stewart, Miss H., Stenographer	380 00		
Disbursements	399 21		
		3,630 78	
<i>Carried forward</i>		10,643 78	760,739 30

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		10,643 78	760,739 30
MINING RECORDERS.—Concluded.			
Miller, N., Recorder	1,100 00		
Disbursements	331 25		
		1,431 25	
Morgan, M. R., Recorder	583 00		
Disbursements	407 50		
		990 50	
Morgan, J. W., Recorder	1,098 00		
Disbursements	433 20		
		1,531 20	
McAulay, N. J., Recorder	1,900 00		
Sarsfield, J. M., Clerk	1,300 00		
Loudon, W. E., Clerk	138 46		
Munro, Miss E., Stenographer	780 00		
Disbursements	806 85		
		4,925 31	
McQuire, H. F., Recorder	500 00		
Disbursements	152 58		
		652 58	
Sheppard, H. E., Recorder	854 68		
Morgan, M. R., Assistant	167 00		
Loudon, W. E., Clerk	61 54		
Disbursements	148 01		
		1,231 23	
Spry, W. L., Recorder	900 00		
Disbursements	116 10		
		1,016 10	
Express	68 65		
King's Printer	1,120 02		
Telegraphing	20 33		
		1,209 00	
PROVINCIAL ASSAY OFFICE.			23,630 95
Leat, Arthur		529 35	
McNeill, W. K.	2,200 00		
Disbursements	63 40		
		2,263 40	
Rothwell, T. E.	1,574 00		
Disbursements	144 30		
		1,718 30	
Supplies	1,179 25		
Disbursements	233 22		
		1,412 47	
MINERAL DISPLAY AT EXHIBITIONS.			5,923 52
Clark, James, Services <i>re</i> Toronto Exhibition		77 00	
West, W. J., Services <i>re</i> Toronto Exhibition		57 00	
General Disbursements <i>re</i> Exhibitions		1,628 63	
			1,762 63
EXPERIMENTAL TREATMENT OF ORES			759 73
MINING COMMISSIONER'S JUDGEMENTS			275 00
SOCIETY MEMBERSHIP FEES			191 90
ANNUAL MEMBERSHIP FEES			35 75
SURVEYS			40,827 29
<i>Carried forward</i>			834,146 07

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.
<i>Brought forward</i>			834,146	07
BOARD OF SURVEYORS			200	00
INVESTIGATION OF TREE DISEASES			5,410	53
INSURANCE			1,234	98
ALLOWANCE TO SCHOOL SECTION IN TOWNSHIP OF SOUTH WALSHINGHAM			150	00
CANADIAN FORESTRY ASSOCIATION, GRANT			300	00
REFUNDS—Miscellaneous			25,561	54
COLONIZATION AND IMMIGRATION.				
PRINTING, ADVERTISING, ETC.		13,085	32	
LAND GUIDES		116	00	
EMIGRATION WORK IN GREAT BRITAIN		23,930	73	
ALLOWANCE TO RICHARD REID AND J. M. CLARK ..		3,112	00	
RENTAL IMMIGRATION OFFICE		1,473	39	
			41,717	44
CONTINGENCIES.				
<i>Departmental.</i>				
Printing and Binding	1,551	83		
Stationery	5,398	60		
			6,950	43
Postage	1,524	90		
Express	186	23		
			1,711	13
Telegraphing	529	91		
Car Fare	40	00		
			569	91
Subscriptions	252	40		
Advertising	12,303	02		
			12,555	42
Typewriters, repairs, etc.			1,451	97
Cain, W. C., travelling expenses	25	00		
Draper, S., travelling expenses	144	90		
Ferguson, Hon. G. H., travelling expenses	900	00		
Grigg, A., travelling expenses	4	55		
Hele, C. C., travelling expenses	125	95		
Hutcheon, J., travelling expenses	589	85		
Niven, F. J., travelling expenses	47	70		
Robbins, H. M., travelling expenses	40	55		
Rorke, L. V., travelling expenses	173	45		
Work, J., travelling expenses	71	15		
			2,123	10
Extra Clerks	9,234	05		
Maps	4,668	85		
Sundries	682	28		
			14,585	18
			39,947	14
<i>Carried forward</i>			948,667	70

Appendix No. 6.—Concluded.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>			948,667 70
<i>CONTINGENCIES.—Concluded.</i>			
<i>Bureau of Mines.</i>			
Printing and Binding	2,899 03		
Stationery	2,840 47		
		5,739 50	
Postage	853 89		
Telegraphing	70 11		
Express and Cartage	28 68		
Advertising	1,475 33		
Subscriptions	430 32		
Maps	1,267 21		
		4,125 54	
Typewriters, repairs, etc.	221 45		
Gibson, T. W., travelling expenses	102 47		
Van der Voort, A., Searching Titles	359 50		
		683 42	
Extra Clerks	1,995 17		
Sundries	110 22		
		2,105 39	
			12 653 85
<i>Forestry.</i>			
Zavitz, E. J., travelling expenses		228 64	
Postage	389 32		
Typewriters, repairs, etc.	167 92		
Extra Clerks	1,176 00		
Supplies	1,047 23		
Sundries	212 69		
		2,993 16	
			3,221 80
<i>Colonization.</i>			
Printing and Binding	8 02		
Stationery	268 64		
		276 66	
Postage	150 58		
Express	74 59		
		225 17	
Telegraphing	113 38		
Subscriptions	48 50		
Typewriters, repairs, etc.	114 50		
		276 38	
Jones, R. A., travelling expenses	62 80		
Macdonell, H. A., travelling expenses	89 87		
Tutt, H., travelling expenses	19 45		
Sundries	122 05		
		294 17	
			1,072 38
			965,615 73

D. GEO. ROSS,

Accountant.

ALBERT GRIGG,

Deputy Minister of Lands and Forests.

Appendix No. 7.

Statement of expenses on account of various services under the direction of the Department of Lands, Forests and Mines for the year ending October 31st, 1918.

Service.	\$ c.	\$ c.
ALGONQUIN PROVINCIAL PARK	29,716 95	
ALGONQUIN PROVINCIAL PARK, CLEANING RIGHT-OF-WAY	149 08	
		29,866 03
QUETICO PROVINCIAL PARK		9,424 20
FUEL INVESTIGATION		54,322 80
VETERANS' COMMUTATION		150 00
ROYAL NICKEL COMMISSION		10,182 05
LEGAL INVESTIGATIONS		1,285 00
BOUNTY ACT, EDWARD VII, CAP. 14.		
Deloro Mining and Reduction Co.	19,284 26	
Coniagas Reduction Co., Ltd.	21,345 63	
Metals Chemical Co., Ltd.	12,689 71	
Canadian Smelting and Refining Co.	1,707 89	
		55,027 49
		160,257 57

D. GEO. ROSS,
Accountant.

ALBERT GRIGG,
Deputy Minister of Lands and Forests,

Appendix No. 8.

PATENTS OFFICE (LANDS BRANCH).

Statement of Patents, etc., issued from 1st November, 1917, to 31st October, 1918.

Public Lands (late Crown)	390
" " (late School)	35
" " (late Clergy Reserves)	6
" " (University)	13
Free Grant Lands (Act of 1913)	297
" " (Act of 1901) (Veterans)	115
Mining Lands (Patents)	337
Mining Leases	68
Crown Leases	20
Licenses of Occupation	50
Timagami Island Leases	2
Sand and Gravel Licenses	18
Total	1,351

CHARLES S. JONES,
Patents Clerk.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

W. C. CAIN,
Chief Clerk in Charge.

Appendix

WOODS AND

Statement of Timber and Amounts accrued from Timber Dues, Ground

QUANTITY AND

Agencies.	Area covered by timber licenses.	Saw logs.				Boom and	
		Pine.		Other.		Pine.	
	Square miles.	Pieces	Feet B.M.	Pieces.	Feet B.M.	Pieces.	Feet B.M.
Western Timber District	12,198	5,095,221	197,181,151	654,582	18,268,281	49,542	5,873,261
Belleville Timber District	693	51,520	1,039,634	68,300	2,060,862	267	28,829
Ottawa Timber District	3,997	311,827	18,691,395	238,052	7,273,194	3,553	409,558
	16,888	5,458,568	216,912,180	960,934	27,602,337	53,362	6,311,648

General Statement

Agencies.	Posts.	Poles.	Bolts.	Pulpwood	Pine.			
	Pieces.	Pieces.	Cords.	Cords.	Pieces.	Cubic Feet.	Transfer bonus.	Interest.
Western Timber District	25,990	1,382	1,816	315,140	1,452	78,874	\$ 3,495 00	c. 15,678 03
Belleville Timber District	3,419	.....	.....	1,899	.....	.....	85 00	125 27
Ottawa Timber District	294	835	.....	21,524	.....	.....	1,160 00	365 59
	29,703	2,217	1,816	338,563	1,452	78,874	4,740 00	16,168 89

JOHN HOUSER,
Chief Clerk in Charge.

No. 9.

FORESTS.

Rent and Bonus during the year ending 31st October, 1918.

DESCRIPTION OF TIMBER.

Dimension.		Cedar.	Piling.				Cordwood.		Tan Bark.	Railway Ties.
Other.							Hard.	Soft.		
Pieces.	Feet B.M.	Lineal feet.	Lineal feet.	Pieces	Feet B.M.	Cords.	Cords.	Cords.		
10,424	992,625	3,436	125,402	1,090	116,627	32,442	24,520	2,410	2,088,935	
1,355	259,661	.....	.....	.....	.....	746	22	347	3,500
4,030	514,150	.....	.....	.....	.....	63	4,022	870	1,664
15,809	1,766,436	3,436	125,402	1,090	116,627	33,251	28,564	3,627	2,094,099	

of Timber.—Concluded.

Amounts accrued.

Trespass.	Timber dues.	Bonus.	Deposits timber sales.	Ground rent.	Fire protection.	Total.
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
30,759 80	673,427 12	468,038 88	118,450 00	62,005 00	159,436 87	1,531,290 70
789 45	4,421 57	683 54	.....	5,277 00	4,217 60	15,599 43
374 16	40,835 95	.....	.....	19,940 00	26,118 60	88,794 30
31,923 41	718,684 64	468,722 42	118,450 00	87,222 00	189,773 07	1,635,684 43

ALBERT GRIGG,
Deputy Minister.

Appendix No. 10.

WOODS AND FORESTS BRANCH.

Statement of Revenue collected during the year ending October 31st, 1918.

Amount of Western collections at Department	\$1,653,014 58
do Belleville collections at Department	15,020 37
do Ottawa collections at Department	88,050 30
	<hr/>
	\$1,756,085 25

WOODS AND FORESTS.

Bonus	\$679,304 17
Timber dues	795,004 08
Ground rent	87,263 93
Transfer fees	4,740 00
Fire protection	189,773 07
	<hr/>
	\$1,756,085 25

WOODS AND FORESTS BRANCH REVENUE.

October 31st, 1918.

WESTERN DISTRICT—

Timber dues	\$733,704 43
Bonus	560,245 25
Ground rent	62,005 00
Interest on dues	15,675 33
Interest on ground rent	2 70
Transfer fees	3,495 00
Timber sale deposits	118,450 00
Fire protection	159,436 87
	<hr/>
	\$1,653,014 58

OTTAWA DISTRICT—

Timber dues	\$40,466 11
Ground rent	19,940 00
Interest on dues	327 16
Interest on ground rent	38 43
Transfer fees	1,160 00
Fire protection	26,118 60
	<hr/>
	88,050 30

BELLEVILLE DISTRICT—

Timber dues	\$4,706 58
Bonus	608 92
Ground rent	5,277 00
Interest on dues	124 47
Interest on ground rent	0 80
Transfer fees	85 00
Fire protection	4,217 60
	<hr/>
	15,020 37
	<hr/>
	\$1,756,085 25

JOHN HOUSER,
Chief Clerk in Charge.ALBERT GRIGG,
Deputy Minister,

Appendix No. 11.

Statement of work done in the Military Office, Lands Branch of the Department of Lands, Forests and Mines, during the year ending October 31st, 1918.

Reference for Veterans' Patents issued	115
Locations under military certificates	23
Certificates applied in payment of lands	11
Certificates surrendered for commutation money	3
Letters received	1,650
Letters written	1,920
Special letters to agents	240
Special letters to mining recorders	92
Maps and reports supplied to veterans	280
Printed forms sent out	320
Copies of Veteran Act supplied	18

H. E. JOHNSTON,
Military Clerk.

ALBERT GRIGG,
Deputy Minister,

W. C. CAIN,
Chief Clerk in Charge.

Appendix No. 12.

Memorandum of parties who passed the Cullers' Examination of 1918.

Rabbitts, Malcolm, 91 Winnipeg Ave., Port Arthur, Ont., examined at Kenora, August 28th, 1918, licensed October 1st, 1918.

Street, John Royden, c/o Jas. Stewart, Port Arthur, Ont., examined at Kenora, August 28th, 1918, licensed October 1st, 1918.

Appendix No. 13.

RECORDS BRANCH, 1917-18.

Communications Received:

From Crown Lands Agents	5,910
“ Mining Recorders	2,883
“ Crown Timber Agents	4,408
“ Homestead Inspectors	1,320
“ Superintendent Algonquin Park	496
“ Superintendent, Quetico Park	123
Orders-in-Council	153
Telegrams	282
Soldiers and Sailors (letters)	660
Nickel Commission	(Figures supplied by them) 1,500
Northern Development Branch	“ “ “ 8,203
Colonization Branch	“ “ “ 5,008
Loan Commissioner	“ “ “ 2,978
Mining Commissioner	“ “ “ 2,989
Forestry Branch	“ “ “ 4,782
Mine Assessor	“ “ “ 1,865
Mine Inspector	“ “ “ 1,712
Provincial Geologist	“ “ “ 404
All other sources	“ “ “ 29,151

Total incoming (Minister's office not included) 74,827

Communications Sent Out:

To Crown Agents, Inspectors, Rangers and Park Superintendents	17,800
To General Public	20,614
Circular letters (timber sales)	1,790
Maps and blue prints	2,898
Mining Reports to foreign countries	520
Mining Reports to United States and other countries	145
Mining Acts	1,400
Nickel Commission (letters)	(Figures supplied by them) 1,000
Nickel Commission (reports)	“ “ “ 850
Northern Development Branch (letters)	“ “ “ 6,202
Northern Development Branch (seed grain) ...	“ “ “ 1,348
Colonization Branch (letters)	“ “ “ 4,147
Colonization Branch (Northern Ontario literature) ..	“ “ “ 17,656
Colonization Branch (Ontario maps)	“ “ “ 1,236
Loan Commissioner	“ “ “ 5,316
Mining Commissioner (letters)	“ “ “ 6,033
Mining Commissioner (orders)	“ “ “ 799
Forestry Branch (letters)	“ “ “ 7,584
Forestry Branch (circulars)	“ “ “ 2,250
Forestry Branch (parcels by post)	“ “ “ 450
Mine Assessor	“ “ “ 1,865
Mine Inspector	“ “ “ 1,211
Provincial Geologist	“ “ “ 382

Total outgoing (Minister's office not included) 103,496

Postage:

Postage for the year, Records Branch	\$2,819 38
“ “ “ Colonization Branch	113 62
“ “ “ Loan Commissioner	150 68
“ “ “ Forestry Branch	380 00

Files:

New files issued, general	5,363
“ “ “ accounts chargeable	511
“ “ “ accounts free	193

ALBERT GRIGG,

Deputy Minister.

S. K. BURDIN,
Chief Clerk, Records Branch.

Appendix No. 14.

Statement showing the number of Locatees and of acres located; of purchasers and of acres sold; of lots resumed for non-performance of the settlement duties and of patents issued in Free Grant Townships during the year ending 31st October, 1918.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of persons cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Baxter	Muskoka.	J. B. Brown, Brace- bridge	1	153	2	19 $\frac{3}{4}$	8	838	6	438
Brunei	"	"	1	99	...	...	1	99	1	100
Cardwell	"	"	3	568	...	...	3	568	1	198 $\frac{3}{4}$
Chaffey	"	"	1	100	...	...	1	100	1	101
Draper .....	"	"	...	...	...	...	...	...	1	111
Franklin .....	"	"	...	...	...	...	...	...	2	100 $\frac{1}{2}$
Freeman	"	"	1	200	...	...	1	200	4	789 $\frac{3}{4}$
Macaulay	"	"	2	167	...	...	2	167	...	...
Medora	"	"	1	100	...	...	1	100	1	159
Monck .....	"	"	...	...	...	...	...	...	...	...
Morrison	"	"	3	431	1	5	...	...	...	...
Muskoka	"	"	1	97	...	...	2	247	2	105
McLean	"	"	1	101	...	...	2	202	...	...
Oakley .....	"	"	...	...	...	...	1	201	1	100
Ridout .....	"	"	...	...	...	...	...	...	...	...
Ryde	"	"	2	214	...	...	2	214	1	121
Sherborne	"	"	1	76	...	...	1	76	...	...
Sinclair	"	"	7	1,193	4	128	12	1,253	8	1,114
Stephenson .....	"	"	...	...	...	...	...	...	...	...
Stisted	"	"	2	204	1	100	2	204	1	100
Watt .....	"	"	...	...	...	...	...	...	1	6 $\frac{1}{2}$
Wood	"	"	2	402 $\frac{1}{2}$	...	...	7	966	2	344
Blair	Parry Sound..	Miss I. M. Campbell, Parry Sound	...	...	1	5	...	...	...	...
Burpee	"	"	1	200	...	...	2	300	1	200
Carling	"	"	3	500	...	...	2	400	2	300
Christie	"	"	6	763	1	50	4	566	...	...
Conger	"	"	2	348	...	...	4	627	7	695
Cowper .....	"	"	...	...	...	...	...	...	4	11
Foley .....	"	"	...	...	...	...	...	...	...	...
Ferguson	"	"	1	100	...	...	1	100	...	...
Hagerman .....	"	"	...	...	...	...	...	...	1	217
Harrison .....	"	"	...	...	1	5	...	...	7	25
Henvey	"	"	6	769	...	...	...	...	1	111 $\frac{1}{2}$
Humphrey .....	"	"	...	...	...	...	...	...	...	...
McConkey .....	"	"	...	...	...	...	...	...	1	94
McDougall	"	"	1	178	...	...	1	91	3	400
McKellar .....	"	"	...	...	...	...	...	...	2	200
McKenzie .....	"	"	...	...	...	...	...	...	2	180
Monteith	"	"	2	299	...	...	1	200	4	679
Shawanaga .....	"	"	...	...	...	...	...	...	1	$\frac{1}{2}$
Wilson .....	"	"	...	...	...	...	...	...	2	171 $\frac{3}{4}$
Chapman	Parry Sound .	Dr. J. S. Freeborn, Magnetawan	5	532	...	...	6	652	4	576
Croft	"	"	1	100	...	...	1	100	2	370
Ferrie .....	"	"	...	...	...	...	...	...	...	...
Gurd .....	"	"	...	...	...	...	...	...	2	400
Lount	"	"	1	31	2	94	1	31	2	128
Machar	"	"	5	597	1	87	9	1,292	2	300
Mills	"	"	1	138	...	...	...	...	1	100
Pringle .....	"	"	...	...	...	...	...	...	4	800

Appendix No. 14.—Continued.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of persons cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Ryerson.....	Parry Sound..	Dr. J. S. Freeborn, Magnetawan	...	...	...	...	...	...	4	715
Spence	"	"	2	199	...	...	1	100	2	199
Strong	"	"	1	100	...	...	1	100	...	...
Armour	Parry Sound..	W. Jenkin, Emsdale..	2	193	...	...	2	193	2	305
Bethune .....	"	"	...	...	...	...	3	501	...	...
Joly	"	"	3	579	1	1	4	670	2	301
McMurrich...	"	"	...	...	...	...	...	...	1	96
Perry .....	"	"	...	...	...	...	...	...	2	184
Proudfoot....	"	"	...	...	1	2	3	349	4	446
Hardy	Parry Sound..	H. J. Ellis, Powassan.	...	...	...	...	...	...	1	100
Himsworth ..	"	"	6	815	2	118	5	609	1	123
Laurier .....	"	"	...	...	...	...	1	118	1	100
Nipissing	"	"	4	500	...	...	3	276	1	100
Patterson....	"	"	1	190	1	2	1	190	1	2½
Bonfield	Nipissing	W. J. Parsons, North	10	1,329	...	...	9	900	10	1,800
Boulter	"	" Bay	1	102	...	...	...	...	2	236
Chisholm	"	"	8	1,075	...	...	6	712	4	400
Ferris	"	"	6	799	...	...	4	499	9	1,120
Anson	Haliburton ...	R. H. Baker, Minden..	...	...	...	...	...	...	2	202
Glamorgan ..	"	"	5	634½	2	115½	2	289	3	197
Hindon .....	"	"	...	...	1	75½	...	...	...	...
Lutterworth..	"	"	...	...	...	...	4	403	...	445
Minden	"	"	3	270½	...	...	2	195	3	200
Snowdon .....	"	"	...	...	...	...	2	291	2	377½
Stanhope....	"	"	1	90	1	45	1	90	4	...
Anstruther ...	Peterborough.	William Hales, Apsley	...	...	...	...	1	98	...	...
Burleigh, N.D.	"	"	1	100	...	...	...	...	1	54
" S.D.	"	"	...	...	...	...	...	...	...	...
Chandos .....	"	"	...	...	...	...	...	...	...	...
Methuen .....	"	"	...	...	...	...	3	300	...	...
Cardiff	Haliburton ...	A. N. Wilson, Kinmount	2	181	...	...	5	500	3	452½
Cavendish....	Peterborough.	"	3	263	...	...	1	100	1	8
Galway	"	"	2	200	...	...	4	519	1	222
Monmouth ...	Haliburton ...	"	4	562	...	...	4	487	3	468
Bangor	Hastings	W. J. Douglas, May-	3	345	...	...	3	346	2	84
Carlow	"	" "nooth	1	100	2	159	10	1,279	4	519
Cashel .....	"	"	...	...	...	...	...	...	...	...
Dungannon ..	"	"	2	288	1	82	1	100	4	706
Faraday	"	"	2	312	...	...	3	412	1	252
Herschel	"	"	1	100	...	...	...	...	1	229
Limerick .....	"	"	...	...	...	...	...	...	2	150
Mayo	"	"	1	100	...	...	1	100	2	257½
Monteagle ...	"	"	1	100	...	...	...	...	2	181
McClure	"	"	1	98	...	...	...	...	3	459
Wicklow	"	"	5	550	1	5	...	...	1	200
Wollaston....	"	"	...	...	1	9	...	...	1	209
Algona, S....	Renfrew.....	Adam Prince, Wilno...	1	100	...	...	...	...	...	...
Brougham ...	"	"	...	...	...	...	...	...	...	...
Brudenell ...	"	"	...	...	...	...	...	...	1	82
Burns .....	"	"	...	...	1	99	...	...	...	...

Appendix No. 14.—Continued.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of persons cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
O'Connor.....	Thunder Bay.	W. A. Burrows, Port	...	...	...	...	...	...	1	160
Oliver.....	"	" Arthur	1	157	...	...	1	157	1	161
Paipoonge, N R	"	"	...	...	...	...	...	...	...	...
" S R	"	"	...	...	...	...	...	...	1	96
Pardee.....	"	"	...	...	...	...	2	280	1	160
Pearson.....	"	"	2	320 $\frac{1}{2}$	...	...	1	160	...	...
Scoble.....	"	"	1	159 $\frac{1}{2}$	...	...	3	470	2	318 $\frac{1}{2}$
Stirling.....	"	"	11	1,291 $\frac{1}{2}$	1	160	15	2,367	1	159 $\frac{1}{2}$
Strange.....	"	"	...	...	...	...	1	158	1	157
Ware.....	"	"	5	560	3	107 $\frac{3}{4}$	2	254	10	966
Atwood.....	Rainy River..	William Cameron,	...	...	...	...	...	...	...	...
Blue.....	"	" Stratton	...	...	1	81	...	...	3	394
Curran.....	"	"	...	...	...	...	...	...	...	...
Dewart.....	"	"	1	162	...	...	1	162	...	...
Dilke.....	"	"	...	...	...	...	...	...	...	...
Morley.....	"	"	1	164	...	...	1	164	...	...
Morson.....	"	"	3	311 $\frac{3}{4}$	3	121	9	934 $\frac{1}{4}$	3	659
McCrosson...	"	"	2	321	...	...	2	321	...	...
Nelles.....	"	"	1	121 $\frac{1}{2}$	...	...	...	...	2	242
Pattullo....	"	"	5	594 $\frac{1}{2}$	1	2	3	356 $\frac{1}{2}$	2	243
Pratt.....	"	"	...	...	...	...	...	...	1	156 $\frac{1}{2}$
Rosebery...	"	"	...	...	...	...	...	...	...	...
Shenston....	"	"	...	...	...	...	...	...	1	81
Sifton.....	"	"	3	480	2	97 $\frac{1}{2}$	6	1,213	3	377 $\frac{1}{2}$
Spohn.....	"	"	3	501 $\frac{1}{2}$	1	81	3	503 $\frac{1}{2}$	1	157 $\frac{1}{2}$
Sutherland...	"	"	2	319 $\frac{1}{2}$	1	1	2	319 $\frac{1}{2}$	1	1
Tait.....	"	"	...	...	...	...	2	286	...	...
Tovell.....	"	"	...	...	1	17 $\frac{1}{2}$	...	...	2	320
Worthington..	"	"	...	...	1	4	...	...	2	271
Aylsworth...	Rainy River..	Alex. McFayden, Emo.	...	...	...	...	...	...	...	...
Barwick.....	"	"	...	...	...	...	...	...	...	...
Burriss.....	"	"	1	176 $\frac{1}{2}$	...	...	1	176 $\frac{1}{2}$	1	80
Carpenter...	"	"	...	...	2	20 $\frac{1}{2}$	1	163	1	161 $\frac{1}{2}$
Crozier.....	"	"	1	164	2	200	1	164	2	322
Dance.....	"	"	2	319 $\frac{1}{2}$	1	$\frac{1}{2}$	1	160	1	165 $\frac{1}{2}$
Devlin.....	"	"	...	...	...	6	...	...	3	368 $\frac{1}{2}$
Dobie.....	"	"	1	173	1	$\frac{1}{2}$	...	...	2	321
Fleming.....	"	"	...	...	...	...	...	...	...	...
Kingsford...	"	"	2	318	...	...	2	198	1	159 $\frac{1}{2}$
Lash.....	"	"	...	...	2	42	...	...	3	210
Mather.....	"	"	4	645 $\frac{1}{2}$	2	80 $\frac{1}{4}$	6	956 $\frac{1}{2}$	3	258 $\frac{1}{2}$
Miscampbell.	"	"	...	...	...	...	...	...	1	159
Potts.....	"	"	...	...	3	323	1	159	3	483
Richardson...	"	"	1	80	...	...	2	320 $\frac{1}{2}$	2	317 $\frac{1}{2}$
Roddick.....	"	"	...	...	...	...	...	...	...	...
Woodyatt....	"	"	...	...	...	...	...	...	...	...
Aubrey.....	Kenora.....	J. E. Gibson, Dryden..	2	239	...	...	2	193	1	151
Britton.....	"	"	2	322	...	...	1	162	...	...
Eton.....	"	"	2	320	...	...	2	320	...	...
Langton.....	"	"	...	...	8	23	...	...	8	24
Melgund.....	"	"	...	...	...	...	1	106	...	...
Mutrie.....	"	"	3	380	...	...	4	432	...	...
Redvers.....	"	"	2	302	1	117	3	462 $\frac{1}{2}$	...	...
Rowell.....	"	"	...	...	...	...	1	103 $\frac{1}{2}$	...	...
Rugby.....	"	"	...	...	...	...	...	...	1	160
Sanford.....	"	"	1	80	1	80	1	80	1	159 $\frac{1}{2}$
Southworth...	"	"	7	853 $\frac{1}{2}$	...	...	4	534	1	161

Appendix No. 14.—Continued.

Township.	District or County.	Agent.	No. of persons located.	No of acres located.	No. of purchasers.	No. of acres sold.	No. of persons cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Temple.....	Kenora	J. E. Gibson, Dryden..	1	160	...	...	2	320	...	...
Van Horne ...	"	"	...	...	...	...	1	120	...	316
Wabigoon	"	"	7	1,120 $\frac{1}{2}$	1	76 $\frac{1}{2}$	6	941 $\frac{1}{2}$	3	523 $\frac{1}{2}$
Wainwright ..	"	"	4	665 $\frac{1}{2}$	...	...	3	478 $\frac{1}{2}$	1	160
Zealand	"	"	3	506	2	245	5	724 $\frac{1}{2}$	6	243
Melick	Kenora	W. L. Spry, Kenora...	3	480	...	...	4	639 $\frac{1}{2}$	2	239 $\frac{3}{4}$
Pellatt	"	"	4	468	2	140 $\frac{1}{2}$	4	514	2	246 $\frac{1}{2}$
Balfour	Sudbury.....	J. K. MacLennan, Sud-	1	160	...	...	1	160	...	...
Blezard	"	bury	...	...	...	...	...	...	3	122 $\frac{1}{2}$
Broder	"	"	1	202	2	109 $\frac{1}{2}$	...	...	4	655 $\frac{1}{2}$
Capreol .....	"	"	...	...	1	200	1	146	1	40
Chapleau.....	"	"	...	...	...	...	...	...	...	...
Dill .....	"	"	...	...	...	...	...	...	...	...
Garson .....	"	"	...	...	...	...	1	163	1	154 $\frac{1}{2}$
Hanmer .....	"	"	...	...	...	...	...	...	1	160 $\frac{1}{2}$
Lumsden.....	"	"	1	160	...	...	...	...	2	321 $\frac{1}{2}$
Morgan .....	"	"	...	...	...	...	...	...	...	...
Neelon.....	"	"	2	317 $\frac{1}{2}$	1	3 $\frac{1}{2}$	9	1,231	2	316
Rayside .....	"	"	...	...	...	...	...	...	1	101 $\frac{1}{4}$
Appelby	Sudbury	John Brown, Markstay	5	648 $\frac{1}{2}$	1	1 $\frac{1}{2}$	4	566	...	...
Casimir	"	"	2	159 $\frac{1}{2}$	...	...	...	...	1	141
Dunnet	"	"	1	141	...	...	...	...	...	...
Hagar	"	"	7	1,059 $\frac{1}{2}$	...	...	3	480	1	100
Jennings .....	"	"	...	...	1	80 $\frac{1}{2}$	1	161	1	159
Kirkpatrick ..	Nipissing ...	"	9	1,245 $\frac{1}{2}$	2	29	...	...	6	970
Ratter	Sudbury	"	4	585	...	...	1	160	2	314
Caldwell	Nipissing	J. A. Philion, Sturgeon	3	320	...	...	...	...	9	1,131
Cosby	Sudbury	Falls	2	321	...	...	...	...	1	160 $\frac{1}{2}$
Grant	Nipissing ..	"	1	147	...	...	1	147	1	159 $\frac{1}{2}$
Macpherson ..	"	"	8	863 $\frac{1}{4}$	3	3	...	...	8	1,184 $\frac{1}{2}$
Marland	Sudbury	"	2	320 $\frac{1}{2}$	...	...	1	160	1	160 $\frac{1}{2}$
Springer	Nipissing	"	4	355	...	...	...	...	5	412
Abinger.....	Lennox and		...	...	...	...	...	...	...	...
	Addington	Charles Both, Denbigh	...	...	...	...	...	...	...	...
Canonto, S....	Frontenac....	"	...	...	...	...	...	...	...	...
" N....	"	"	...	...	...	...	...	...	...	...
Clarendon....	"	"	...	...	1	2	...	...	...	...
Denbigh....	Lennox and	"	...	...	...	...	...	...	...	...
	Addington	"	1	199	...	...	...	...	...	...
Miller (pt.)...	Frontenac....	"	...	...	...	...	...	...	...	...
Palmerston ..	"	"	...	...	...	...	...	...	...	...
McClintock ...	Haliburton....	Unattached .....	...	...	...	...	...	...	...	...
Airy	Nipissing	"	2	263 $\frac{1}{2}$	...	...	1	106	...	...
Finlayson ...	"	"	...	...	3	48 $\frac{1}{4}$	...	...	8	164
Murchison ...	"	"	...	...	...	...	...	...	...	...
Sabine .....	"	"	...	...	...	...	2	267	3	273 $\frac{1}{2}$
*O'Brien	Temiskaming.	"	49	...	...	...	...	...	...	5,018
*Owens	"	"	4	...	...	...	...	...	...	477
			425	54,182 $\frac{1}{4}$	110	4,570 $\frac{1}{4}$	360	47,715 $\frac{1}{2}$	406	47,695

*Located under Returned Soldiers' and Sailors' Land Settlement Act, 1917

No. of lots assigned 166

No. of acres assigned 20,970

Appendix No. 14.—Concluded.

ISLANDS SOLD

Township	District or County	Agent	—
Islands in Lake of Bays, Franklin	Muskoka	J. B. Brown, Bracebridge	53/100
Island in Muskoka	} “	“ “	5
Part of Craigenputtock, Muskoka			
Island D. B. Conger	Parry Sound	Miss J. M. Campbell, Parry Sound	8
“ Phoenix “	“	“ “	4.50/100
“ B 217 “	“	“ “	7.80/100
“ B 67 “	“	“ “	1.30/100
“ 372 A., Harrison	“	“ “	37/100
(Pt.) H. B. 2 “	“	“ “	6.60/100
Island A 660 “	“	“ “	1.34/100
“ A 661 “	“	“ “	2.35/100
“ A 499 “	“	“ “	4.36/100
“ B 502 Cowper	“	“ “	4
“ B 504 “	“	“ “	5.50/100
“ B 316 “	“	“ “	40/100
“ B 443 “	“	“ “	90/100
Island in Wauquimakog Lake, Wilson	“	“ “	14.75/100
Nivcent Island, Patterson	“	W. H. Ellis, Powassan ..	2. 6/100
Island No. 2, Cavendish	Peterborough	A. N. Wilson, Kinmount.	8
			77 $\frac{3}{4}$

SELBY DRAPER, Free Grants Clerk.
W. C. CAIN, Chief Clerk.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 15.

Statement showing the number of purchasers and of acres sold; of lots resumed for non-performance of the settlement duties; and of patents issued in Townships other than Free Grant during the year ending 31st October, 1918.

Township.	District or County.	Agent.	No. of acres sold.	No. of pur- chasers.	No. of sales cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Blount	Temiskaming.	S. J. Dempsay, Cochrane	370½	3	2	224	.....	.....
Brower	"	"	290½	2	3	454	.....	.....
Calder	"	"	726	5	3	452	.....	.....
Clute	"	"	2,248	15	16	2,472	5	784
Colquhoun .....	"	"	.....	.....	.....	.....	.....	.....
Fauquier	"	"	1,510	11	6	1,074	3	449
Fournier	"	"	619½	4	1	151	.....	.....
Fox	"	"	789	5	2	304	.....	.....
Glackmeyer	"	"	302	2	2	281	9	1,055
Kennedy	"	"	450	3	1	152	.....	.....
Lamarche	"	"	92	1	5	796	2	326
Leitch .....	"	"	.....	.....	1	80	.....	.....
Newmarket	"	"	1,260	8	5	804½	.....	.....
Pyne	"	"	989½	6	4	566½	.....	.....
Shackleton	"	"	1,512	10	9	1,168	.....	.....
Catharine	Temiskaming.	Jos. Woollings, Englehart	.....	.....	2	159½	1	152½
Chamberlain	"	"	158½	1	.....	.....	3	474½
Dack .....	"	"	.....	.....	.....	.....	1	160½
Eby	"	"	200	5	.....	.....	5	200
Evanturel	"	"	161	1	.....	.....	3	397
Gross	"	"	317	2	6	954	.....	.....
Ingram	"	"	156	1	1	157½	.....	.....
Marter	"	"	320½	2	4	639½	2	201
Marquis	"	"	320	2	2	320	1	158½
Otto .....	"	"	.....	.....	.....	.....	15	700
Pacaud	"	"	1,381	8	4	638½	1	40½
Pense	"	"	509½	4	.....	.....	.....	.....
Robillard	"	"	103	1	.....	.....	2	266
Savard	"	"	319	2	.....	.....	2	320
Sharpe	"	"	638½	4	1	159½	4	601
Truax	"	"	160	1	2	317	.....	.....
Armstrong	Temiskaming.	J. W. Bolger, New Lis-	.....	.....	.....	.....	3	477½
Auld	"	" " keard	.....	.....	2	215	.....	.....
Beauchamp	"	"	158½	1	2	269½	3	479
Brethour	"	"	320	2	.....	.....	6	958
Bryce	"	"	772	5	5	899	1	40
Bucke	"	"	402	3	.....	.....	4	587
Cane	"	"	402½	3	1	80	1	40
Casey .....	"	"	.....	.....	.....	.....	17	1,000
Dymond	"	"	159½	1	.....	.....	4	647
Firstbrook	"	"	365	3	2	325	1	40
Harley .....	"	"	.....	.....	.....	.....	2	320
Harris	"	"	80	1	.....	.....	1	158
Henwood	"	"	467½	3	.....	.....	5	654
Hilliard	"	"	324	2	1	159	2	310
Hudson .....	"	"	.....	.....	1	134	3	479
Kerns	"	"	160	1	.....	.....	4	396
Lundy	"	"	165½	1	1	160½	1	159
Tudhope	"	"	603½	4	5	908	5	200½
Smyth	Temiskaming.	H. E. Sheppard, Elk Lake	319½	2	1	158½	3	120
Lorrain	Temiskaming.	Neil J. McAulay, Hailey- bury	583½	.....	1	160	2	93½

Appendix No. 15.—Continued.

Township.	District or County.	Agent.	No. of acres sold.	No. of pur- chasers.	No. of sales cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Beatty	Temiskaming.	F. E. Ginn, Matheson ..	545	4	1	319 $\frac{1}{2}$	10	664
Benoit	"	"	93 $\frac{1}{2}$	7	.....	.....	.....	.....
Bond	"	"	1,769	11	3	397 $\frac{1}{2}$	.....	.....
Bowman	"	"	156	1	5	801	5	768
Calvert	"	"	635 $\frac{1}{2}$	4	1	320 $\frac{1}{2}$	1	160
Carr	"	"	626	4	2	317	7	1,078
Clergue	"	"	639 $\frac{1}{2}$	4	4	797	6	522
Currie	"	"	464 $\frac{1}{2}$	3	4	592	1	160 $\frac{1}{2}$
Dundonald	"	"	694	5	2	835 $\frac{1}{2}$	.....	.....
Evelyn	"	"	325 $\frac{1}{2}$	3	2	325 $\frac{1}{2}$	.....	.....
German	"	"	438 $\frac{1}{2}$	3	9	1,468	1	2
Hislop	"	"	1,743	11	6	1,020	1	$\frac{1}{2}$
Matheson	"	"	471 $\frac{1}{2}$	3	2	213 $\frac{1}{2}$	1	160
Mountjoy	"	"	1,811	12	4	787	1	148 $\frac{1}{2}$
McCart	"	"	748	5	1	323 $\frac{1}{2}$	.....	.....
Playfair	"	"	921	6	1	313 $\frac{1}{2}$	1	161
Stock	"	"	474	3	8	491	1	144
Taylor	"	"	456 $\frac{1}{2}$	4	4	749 $\frac{1}{2}$	2	1 $\frac{1}{2}$
Walker	"	"	717	5	3	.....	2	319 $\frac{1}{2}$
Casgrain	Algoma	T. V. Anderson, Hearst.	548	4	1	252	1	148
Eilber	"	"	160	1	5	731	.....	.....
Hanlan	"	"	1,307	9	5	765	1	196
Kendall	"	"	599	4	82	12,819	4	537
Lowther	"	"	875	6	.....	.....	.....	.....
Forbes	Thunder Bay.	W. A. Burrows, Port	654 $\frac{1}{2}$	5	2	322	.....	.....
Lyon	"	Arthur	1,046 $\frac{1}{2}$	6	9	1,784 $\frac{1}{2}$	6	867
Nepigon	"	"	401	3	1	317 $\frac{1}{2}$	4	615
Aweres	Algoma	E. Noble, Sault Ste. Marie	.....	.....	.....	.....	1	116
Tarentorus .....	"	"	.....	.....	1	160	.....	.....
Vankoughnet ..	"	"	.....	.....	3	615	.....	.....
Watten	Rainy River..	C. J. Hollands, Fort Frances	.....	.....	.....	.....	.....	.....
Bright	Algoma	Thos. Dodds, Thessalon.	.....	.....	.....	.....	1	154
Day	"	"	431	.....	1	309	1	110
Gladstone .....	"	"	.....	.....	.....	.....	.....	.....
Haughton	"	"	144	1	.....	.....	.....	.....
Johnson .....	"	"	.....	.....	.....	.....	.....	.....
Kirkwood	"	"	147	1	.....	.....	.....	.....
Parkinson	"	"	480 $\frac{1}{2}$	3	.....	.....	.....	.....
Patton	"	"	160	1	2	238 $\frac{1}{2}$	1	160
Rose .....	"	"	.....	.....	1	157	2	312
Striker .....	"	"	.....	.....	1	62	.....	.....
Wells	"	"	2	1	.....	.....	.....	.....
Hallam	Sudbury	R. W. Teasdale, Massey	161	1	.....	.....	1	80
Harrow	"	"	612	5	.....	.....	3	308
May	"	"	587	6	.....	.....	3	483 $\frac{1}{2}$
Salter	"	"	357	4	.....	.....	3	411
Shedden	Algoma	"	160	1	.....	.....	.....	.....
Victoria .....	"	"	.....	.....	.....	.....	1	80
Dowling	Sudbury	J. K. MacLennan, Sud- bury	79	1	.....	.....	7	324
Scollard	Nipissing	J. A. Phillion, Sturgeon	160	1	.....	.....	1	161
Mason	"	" Falls	.....	.....	.....	.....	.....	.....

Appendix No. 15.—Continued.

Township.	District or County.	Agent.	No. of acres sold.	No. of pur- chasers.	No. of sales cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Hugel	Nipissing	John Brown, Markstay.	160	1				
Widdifield	Nipissing	W.J. Parsons, North Bay	1,755	11	4	640	6	940
Nairn	Sudbury	Edward Arthurs, Espanola	391½	3			1	167
Admaston	Renfrew	Unattached	90	1			3	240
Bagot	"	"	300	3			1	100
Blithfield	"	"					1	190
Bromley	"	"					2	480
McNabb	"	"	50	1				
Stafford	"	"					1	100
Westmeath	"	"	100	1			1	100
Alfred	Prescott	Unattached						
Adolphustown ..	Lennox	Unattached						
Anglesea	"	"	200	2			1	225
Effingham	"	"	102	2			3	117
Kaladar	"	"					2	425
Sheffield	"	"					1	200
Artemesia	Grey	Unattached					1	16½
Bentinck	"	"					5	439½
Egremont	"	"					4	355
Gleneig	"	"					3	395
Holland	"	"					3	257
Normanby	"	"					2	183
Osprey	"	"					2	209
Proton	"	"	47	1			1	99
Sullivan	"	"					4	450
Sydenham	"	"					1	100
Arran	Bruce	Unattached						
Brant	"	"					2	152
Bruce	"	"					3	250
Culross	"	"					1	125
Elderslie	"	"					8	634
Greenock	"	"						
Huron	"	"						
Kincardine	"	"						
Saugeen	"	"					1	25
Barrie	Frontenac ...	Unattached	100	1			1	100
Bedford	"	"					1	1
Kennebec	"	"						
Olden	"	"	115½	1			1	115½
Bathurst	Lanark	Unattached						
Beckwith	"	"					2	200
Elmsley	"	"						
Lanark	"	"						
Plantagenet ..	"	"						
S. Sherbrooke ..	"	"					1	400
N. Sherbrooke ..	"	"						
Sandwich, E. ..	Essex	Unattached					1	87 100
Sandwich, W. ..	"	"					1	80 100
Seymour	N'thumberl'd.	Unattached						

Appendix No. 15.—Continued.

Township.	District or County.	Agent.	No. of acres sold.	No. of pur- chasers.	No. of sales cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Carden	Victoria	Unattached .....	.....	.....	.....	.....	1	106½
Dalton .....	" .....	" .....	.....	.....	.....	.....	1	164
Digby .....	" .....	" .....	.....	.....	.....	.....	2	487
Laxton .....	" .....	" .....	.....	.....	.....	.....	1	102
Somerville .....	" .....	" .....	.....	.....	.....	.....	1	201
Edwardsburgh	Grenville ...	Unattached .....	.....	.....	.....	.....	.....	.....
Dummer	Peterborough	" .....	.....	.....	.....	.....	1	50
Harvey	Peterborough.	Unattached	97½	1	.....	.....	2	194½
Haughton	Norfolk	Unattached .....	.....	.....	.....	.....	.....	.....
Hungerford ...	Hastings	Unattached	100	1	.....	.....	2	200
Tudor	"	"	166½	2	.....	.....	5	301
Trafalgar ...	Halton .....	" .....	.....	.....	.....	.....	3	8
Rama	Ontario	Unattached .....	.....	.....	.....	.....	1	341
Cornwall	Stormont ...	Unattached .....	.....	.....	.....	.....	2	196
Roxborough ...	" .....	" .....	.....	.....	.....	.....	1	152
Matchedash ...	Simcoe	Unattached	100	1	.....	.....	1	80
W.Gwillimbury	" .....	" .....	.....	.....	.....	.....	1	60½
Arthur	Wellington ...	Unattached .....	.....	.....	.....	.....	1	100
Peel .....	" .....	" .....	.....	.....	.....	.....	.....	.....
Humberstone .	Welland	Unattached .....	.....	.....	.....	.....	4	263
Wainfleet	"	"	31	1	.....	.....	1	31
Maisonville ...	Temiskaming.	Unattached .....	.....	.....	.....	.....	20	638
Allen	Sudbury	Unattached	12	1	.....	.....	1	12
Bigwood .....	" .....	" .....	.....	.....	.....	.....	.....	.....
Burwash .....	" .....	" .....	.....	.....	.....	.....	1	176½
Dennison .....	" .....	" .....	.....	.....	.....	.....	.....	.....
Drury .....	" .....	" .....	.....	.....	.....	.....	.....	.....
Dryden .....	" .....	" .....	.....	.....	.....	.....	2	160
Falconbridge .	" .....	" .....	.....	.....	.....	.....	.....	.....
Gough	"	"	328	2	.....	.....	.....	.....
Graham .....	" .....	" .....	.....	.....	.....	.....	.....	.....
Levack .....	" .....	" .....	.....	.....	.....	.....	5	196
Lorne	"	"	600	4	.....	.....	4	600
Louise	"	"	298½	2	.....	.....	2	298½
MacLennan ...	"	"	231	2	.....	.....	.....	.....
Snider .....	" .....	" .....	.....	.....	.....	.....	2	95
Waters .....	" .....	" .....	.....	.....	.....	.....	.....	.....
Badgerow ...	Nipissing ...	Unattached .....	.....	.....	.....	.....	4	531
Bastedo .....	" .....	" .....	.....	.....	.....	.....	.....	.....
Crerar .....	" .....	" .....	.....	.....	.....	.....	2	219
Field .....	" .....	" .....	.....	.....	.....	.....	2	2
Gibbons	"	"	160	1	.....	.....	1	160
Drayton	Kenora	Unattached	67½	2	.....	.....	2	67½
Malachi	"	"	5	1	.....	.....	1	5
Redditt .....	" .....	" .....	.....	.....	.....	.....	1	17¾
Chesley	Algoma	Unattached .....	.....	.....	.....	.....	2	80½
Cobden	"	"	164½	1	.....	.....	1	164½
Gould .....	" .....	" .....	.....	.....	.....	.....	.....	.....
Pic	Thunder Bay	Unattached .....	.....	.....	.....	.....	2	70

Appendix No. 15.—Concluded.

Township.	District or County	Agent.	No. of acres sold.	No. of pur- chasers.	No. of sales cancelled.	No. of acres resumed.	No. patents issued.	No. of acres patented
Townsite—								
Armstrong..	Temiskaming.	Unattached .....	.....	.....	.....	.....	1	$\frac{1}{6}$
Grant	"	"	5	5	.....	.....	2	$2\frac{1}{2}$
MacFarlane.	Kenora	" .....	.23	1	.....	.....	3	.....
Sioux Look- out .....	"	" .....	.....	.....	.....	.....	4	$1\frac{1}{2}$
Dryden .....	"	" .....	.....	.....	.....	.....	.....	$1\frac{1}{2}$
Winnipeg River Crossing..	"	" .....	.25	1	.....	.....	3	$1\frac{1}{2}$
Hearst	Algoma.....	T. V. Anderson .....	.....	.....	.....	.....	8	$2\frac{1}{4}$
Hilton	"	W. E. Whybourne, Marksville	16	1	.....	.....	1	33
Capreol	Sudbury	Unattached .....	.....	.....	.....	.....	1	$\frac{91}{100}$
Gowganda....	Temiskaming.	" .....	.....	.....	11	$\frac{1}{2}$	.....	.....
Iroquois Falls	"	F. E. Ginn, Matheson ..	.....	.....	.....	.....	2	$\frac{61}{100}$
Kirkland Lake	"	Unattached.....	1	1	.....	.....	.....	.....
Muskokaville.	Muskoka.....	J.B. Brown, Bracebri'ge	2	1	.....	.....	.....	.....
Inverhuron ..	Bruce.....	Unattached.....	.....	.....	.....	.....	1	$52\frac{1}{2}$
Amherstburg..	Essex.....	" .....	.....	.....	.....	.....	2	$\frac{3}{4}$
Eugenia	Grey	"	$1\frac{1}{2}$	1	.....	.....	1	$1\frac{1}{2}$
Petewawa....	Renfrew.....	Finlay Watt, Renfrew.	$\frac{3}{5}$	2	.....	.....	.....	.....
Barrie.....	Simcoe.....	Unattached .....	.....	.....	.....	.....	1	3
Holland Land- ing	York.....	" .....	.....	.....	.....	.....	1	4
WATER LOTS.								
City—								
Brockville ..	Leeds	Unattached.....	$\frac{7}{10}$	1	.....	.....	1	$\frac{7}{10}$
Kingston ...	Frontenac ...	"	$\frac{1}{4}$	1	.....	.....	1	$\frac{1}{4}$
Saltfleet.....	Wentworth ..	"	$3\frac{1}{4}$	9	.....	.....	9	$3\frac{1}{4}$
Ft. William.	Thunder Bay.	W. A. Burrows, Port Arthur	$21\frac{3}{4}$	2	.....	.....	2	$21\frac{3}{4}$
ISLANDS.								
Mason—	Nipissing ...	J. A. Philion Stayner	.....	.....	.....	.....	.....	.....
Part Island C	.....	Falls	$9\frac{1}{2}$	2	.....	.....	2	$9\frac{1}{2}$
Rama—	Ontario	Unattached.....	4	1	.....	.....	1	4
Rama Island	.....	.....	.....	.....	.....	.....	.....	.....
Bedford in—	Frontenac ...	"	1	1	.....	.....	1	1
Wolf Lake..	.....	.....	.....	.....	.....	.....	.....	.....
Effingham—	Lennox and	"	15	1	.....	.....	1	15
Island A ...	Addington.	" .....	.....	.....	.....	.....	.....	.....
Crosby—	Leeds	"	$\frac{1}{2}$	1	.....	.....	1	$\frac{1}{2}$
Island G ...	.....	.....	.....	.....	.....	.....	.....	.....
Lansdowne—	"	"	$2\frac{5}{8}$	1	.....	.....	1	$2\frac{5}{8}$
Dominion Is- land.....	.....	.....	.....	.....	.....	.....	.....	.....
Total			50,733	386	295	45,027 $\frac{1}{2}$	422	36,900

Number of lots assigned.....22

Number of sales restored.....19

W. R. LEDGER, Sales Clerk.

W. C. CAIN, Chief Clerk in Charge.

Number of acres assigned.....2820

Number of acres restored.....3107

ALBERT GRIGG,

Deputy Minister of Lands and Forests.

Appendix No. 16.

Statement of Crown Surveys completed and closed during the twelve months ending October 31st, 1918.

No	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amount Paid.	No in Acres.
1	April 20, 1915	Lang & Ross ...	Survey of Islands on the north shore of Lake Huron and Georgian Bay, Districts of Manitoulin and Parry Sound	\$ c.	
2	July 13, 1917	D. J. Gillon	Survey of Namakan River, District of Rainy River	3,690 10	
3	July 24, 1917	J. L. Morris	Survey of the Township of Kapuskasing, District of Algoma	569 47	
4	Oct. 30, 1917	David Beatty ...	Re-survey of the Township of O'Brien, District of Algoma	2,094 47	51,444
5	Oct. 19, 1917	H. M. Anderson.	Re-survey of the Township of Owens, District of Timiskaming.	1,335 35	52,062
6	Oct. 24, 1917	J. S. Dobie	Survey of the Township of Idington, District of Algoma	3,988 20	51,920
7	May 12, 1918	Jas. Hutcheon ..	Examination of Cadwell Water Lot on Lake Erie	7,255 13	51,959
8	Jan. 26, 1918	S. B. Code	Survey of Islands in Rideau Lake within the limits of Lot 14, Concession I, Township of Burgess..	62 47	
9	Jan. 26, 1916	McAuslan & Anderson	Survey of Peter Long Lake, in the Districts of Timiskaming and Sudbury	138 00	
10	May 12, 1918	Jas. Hutcheon ..	Examination of Cadwell Water Lot on Lake Erie. Expenses of J. J. Newman	318 18	
			Aikenhead Hardware Co., boom chains and wire	47 15	
				7 15	
				19,505 67	207,385

L. V. RORKE,
Director of Surveys.

ALBERT GRIGG,
Deputy Minister Lands and Forests.

Appendix No. 17.

Statement of surveys in progress during the twelve months ending October 31st, 1918.

No.	Date of Instructions.	Name of Surveyor.	Description of Surveys.	Amount Paid.
				\$ c.
1	Sept. 7, 1917	A. L. Russell ...	Survey of the shores of low Shebandowan Lake, District of Thunder Bay	392 50
2	June 17, 1918	Phillips & Benner	Survey certain boundaries of the Black Sturgeon River Pulp and Timber Limit, District of Thunder Bay	4,305 00
3	April 20, 1918	H. J. Beatty	Survey of certain outlines of townships, District of Timiskaming	2,598 75
4	May 20, 1918	David Beatty ...	Survey of the Township of Williamson, District of Timiskaming	5,334 00
5	June 14, 1918	E. R. Bingham..	Survey certain base and meridian lines, District of Thunder Bay	3,441 37
6	June 26, 1918	Lang & Ross	Survey of the Township of Cumming, District of Algoma	5,250 00
				21,321 62

L. V. RORKE,
Director of Surveys.

ALBERT GRIGG,
Deputy Minister Lands and Forests.

Appendix No. 18.

Statement of Municipal Surveys for which instructions issued during the twelve months ending October 31st, 1918.

No.	Name of Surveyor.	No.	Date of Instructions.	Description of Survey.
1	W. A. & W. H. Brown	716	Feb. 14, 1918	To survey the road allowance between lots Nos. 10 and 11, in the third concession, Township of East Gwillimbury, County of York, and to mark the limits of said road allowance by durable monuments on the ground.
2	S. B. Code ...	717	June 4, 1918	To survey the road allowance between concessions 5 and 6, in the Township of Goulburn, across lots 16, 17 and 18, and that stone or other durable monuments be placed to mark the limits of the said road allowance.
3	George Ross ..	718	July 8, 1918	To survey the sideline road allowance between lots 8 and 9 through the whole breadth of the Township of Crowland, in the County of Welland, and also the side road allowance between lots 16 and 17 across the 6th concession of said township, and that stone or other durable monuments be placed to mark the said road allowance
4	Roger M. Lee..	719	Oct. 22, 1918	To survey the original road allowance between lots 13 and 14, in the 1st concession of the said Township of Wainfleet, in the County of Welland, and that stone or other monuments be planted to mark the position of said road allowance at the intersection with the road allowance between the 1st and 2nd concessions, and at different points to the lake shore

L. V. RORKE,
Director of Surveys.

ALBERT BRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 19.

Statement of Municipal Surveys confirmed during the twelve months ending
October 31st, 1918.

No.	Name of Surveyor.	No.	Date of Instructions.	Description of Surveys.	Date when confirmed under R.S.O. 1914, Chap. 166, Secs. 10-15 inclusive.
1	MacKay, MacKay & Webster	7477	April 21, 1915	To survey the westerly part of the Toronto and Hamilton Highway	Jan. 22nd, 1918
2	Oliver Smith ...	711	May 30, 1917	To survey the concession road allowance between concessions 4 and 5 in the Township of Verulam across lot No. 5 and that stone or other durable monuments be placed at the front angles of lot No. 5 in the 5th concession	
3	E. D. Bolton ...	715	Sept. 21, 1917	To survey the road allowance between lots 10 and 11, across concessions 9 and 10, in the Township of Egremont, in the County of Grey, and to plant stone or other durable monuments to mark the boundaries of said road allowance	July 10th, 1918 July 22nd, 1918

L. V. RORKE,
Director of Surveys.

ALBERT GRIGG,
Deputy Minister Lands and Forests.

Appendix No. 20.

SURVEY OF THE TOWNSHIP OF KAPUSKASING, DISTRICT OF ALGOMA.

PEMBROKE, March 20th, 1918.

SIR,—I have the honor to submit the following report on the survey of the Township of Kapuskasing, in the District of Algoma, in accordance with instructions dated July 24th, 1917.

The Canadian Northern passes through this township, crossing the eastern boundary in concession four it runs in a north-westerly direction, crossing the Nemegosenda and Kapuskasing Rivers, and skirting the north end of Kapuskasing Lake it crosses the west boundary in concession ten, there being one station in the township named Agate, about thirty chains from north-west corner of the lake, but no accommodation exists at present for freight or passengers.

I commenced my survey in the latter part of August, 1917, by retracing the south boundary from south-east corner westerly, this was run by O.L.S. Niven in 1899, but owing to a bush fire having run through that section in the fall of that year, it was impossible to follow same in places and I had to cut out a new line for the first five miles. On the remainder of this boundary, excepting in swamps, the second growth was so thick that a line had to be re-cut before it could be chained and posted. The north boundary was run by O.L.S. Beatty, in 1912, and nearly all of this had also to be re-cut before we could post it. Chaining westerly along the south boundary I made each lot twenty-five chains and twenty-five links in width, and after making the proper allowance for roads, the meridians were run north astronomically, from this boundary, in the centre line of road allowance between lots six and seven; between twelve and thirteen; between eighteen and nineteen and between twenty-four and twenty-five; the concession lines were run west astronomically as chords of latitude, from the points determined upon on the east boundary between concessions two and three; between four and five and between six and seven; the other two concession lines were run east and west from points established on side line between lots six and seven. The survey was carried out in accordance with instructions; substantial wooden posts being planted at all lot corners and at all intersections of surveyed lines with road allowance along the rivers, lakes and right-of-way of the railroad; wooden guide posts being planted in centre line of road allowance, iron posts being planted where instructed. The field notes show result of survey in detail. The intersections of all surveyed lines with centre line of railway were carefully noted and sufficient measurements taken to accurately locate the centre line of railway right-of-way.

A careful traverse was made of Nemegosenda River and of Kapuskasing Lake and River, and ties made to the islands in the lakes and posts marked thereon. An allowance for road one chain in perpendicular width was laid out on both sides of above mentioned rivers and around the lake, also around the north side of small lakes on the south boundary on lots fourteen and fifteen. All lines were well cut and blazed, bearing trees being taken for all posts at lot corners. Frequent observations for azimuth were taken.

Generally speaking this township is covered with a thick growth of timber, principally spruce from four to nine inches in diameter, with scattered areas of poplar, balsam, white birch, and cedar varying in size from five to fifteen inches in diameter, there being a thick growth of underbrush throughout the township, making the cutting of lines very heavy. Prior to the construction of the railway

there were scattered areas with spruce from fifteen to twenty-four inches in diameter, but this was practically all removed for railroad construction purposes.

Along the Nemegosenda River the banks are low with marshes extending from five to twenty chains back, the subsoil being clay, along the Kapuskasing the banks are a little higher, but both streams overflow their banks for considerable areas during the spring freshet. Kapuskasing Lake is very shallow with a hard clay bottom, the banks being mostly low; and are flooded in a great many cases during high water. The railway crosses a small bay in northwest corner of the lake on a trestle about fifty chains long, and nearly all the piles for a trestle were driven across the bay in the north-east corner of the lake, but for some reason this was abandoned and the railway diverted to the north. Owing to the lake being so shallow, it is very rough during wind storms, which are of frequent occurrence and detract from the value of this lake as a summer resort. The water in the lake is usually of a muddy color, and fish can only be taken by nets; there being a plentiful supply of white fish, pike and pickerel.

A small Indian village, with shacks, occupied by six or seven families, is situated on lot eleven, concession seven, south of the railway, and I understand Indians have been living on this point for about eighty years. They of course trap and hunt in the winter and obtain a bountiful supply of moose meat along the rivers in the summer.

The surface is mostly level and swampy with occasional ridges which seldom rise to a height of more than fifty feet above the lake level, the north-west corner being somewhat broken, with Mount Horden situated on lots twenty-five and twenty-six, concession eleven, on which fire rangers have built one of their lookout stations, from which I understand a very extensive view is obtained, this being one of the land marks of this section.

Owing to the greater portion of the township being swampy with deep moss, and the ridges being mostly sandy loam, I do not consider it is suitable for agricultural development, its chief asset being timber suitable for pulpwood; the best land noticed was on line between concessions eight and nine, lots one to six inclusive, and on line between concessions two and three, lot nineteen to twenty-eight. Between Nemegosenda River and Kapuskasing Lake the land is mostly wet and swampy, the same may be said of that portion north of the railway and west of Kapuskasing River, while that portion south of the railway and west of the lake is about half swamp and half rolling; with drainage it might turn out good agricultural land, but I do not consider that more than thirty per cent. of the township is suitable for agricultural purposes.

No economic minerals are noted and there are no sites for water powers.

Accompanying this report are a general plan, timber plan, field notes including traverse sheets, the customary affidavits and account in triplicate.

I have the honour to be, Sir,

Your obedient servant,

(Signed) J. L. MORRIS,

Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines,
Toronto, Ontario.

*Appendix No. 21.**Re-Survey of the Township of O'Brien, District of Algoma.*

PARRY SOUND, February 21st, 1918. . .

SIR,—I have the honour to submit the following report on the re-survey of the Township of O'Brien, in accordance with your instructions, dated August 30th, 1917.

This township was surveyed under the nine-mile system, by O.L.S. Fullerton, 1913, and his report, dated April 11th, 1914, which is now on file in your Department, so fully describes the township that it is not necessary for me to go into it in detail, he having run all the side lines and concession lines would have a better opportunity of reporting on the natural resources of this township than I have, seeing that I only ran certain concession lines. Suffice it to say that I consider this township the best I have yet seen in Northern Ontario.

The experimental farm on the west side of the Kapuskasing River, adjoining the Transcontinental Railway, fully demonstrates the splendid quality of the soil for agricultural purposes. A fair sized town is in the making on the east side of the Kapuskasing River, adjacent to the railway, for the housing of returned soldiers, who were busily engaged in preparing land for settlement.

Practically all of the larger timber has been removed for railway and construction purposes, the Kapuskasing and Woman Rivers affording convenient means of getting this timber to the railroad. What is now standing is suitable for pulpwood and fuel only. That suitable for pulpwood I found mainly in the north and south portions of the township, that in the centre of the town being mainly smaller timber from three to six inches in diameter.

My field notes are prepared from survey made by me of the lines between Concessions 2 and 3, 4 and 5, 8 and 9, 10 and 11, 14 and 15, 16 and 17, and the field notes of Concession 6 and 7, 12 and 13, are copied from those of Mr. Fullerton's, the only alterations I had to make being the changing of the markings of the posts due to the new numbers of the concession lines. The field notes I am returning of the side lines have been compiled from Mr. Fullerton's field notes, the depths of the concessions being obtained by chaining, from the intersection of the concession lines run by me with the side lines run by Mr. Fullerton, to the nearest post planted by him. The blank lines between Concessions 3 and 4, Concessions 9 and 10, and Concessions 15 and 16, were run in the original survey by Mr. Fullerton as concession lines between Concessions 2 and 3, 6 and 7, 10 and 11 respectively, and on these lines I destroyed his posts, but they now mark the blank lines between the concessions above enumerated, posts being planted by me at their intersection with the side lines. Posts along the Transcontinental Railway planted by Mr. Fullerton from Lots 1 to 12 inclusive were destroyed by me, as this part of the railway is not now the front of a concession.

A sufficient number of observations were taken to check the bearings of the lines, and the field notes of the lines run by me show the results of the survey in detail. The plan accompanying this report has been compiled from my survey notes and from Mr. Fullerton's plan and field notes.

Game does not appear to be very plentiful. Moose trails were noticed in the north-east corner of the township around Lily Lake. The only evidence of fur-

bearing animals was a couple of beaver dams. Owing to this survey having been performed in the late fall, I am not able to state anything about fishing.

Accompanying this report are a general plan, field notes, the usual affidavits and account in triplicate.

All of which is respectfully submitted.

I have the honour to be, Sir,

Your obedient servant,

(Signed) DAVID BEATTY,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 22.

SURVEY OF THE TOWNSHIP OF OWENS, IN THE DISTRICT OF TIMISKAMING.

NORTH BAY, February 9th, 1918.

SIR,—In accordance with instructions from your Department, bearing date of October 19th, 1917, I have made a re-survey of the Township of Owens, in the district of Timiskaming, the field work being completed on the 28th day of November following the date of instructions.

The township of Owens was originally subdivided by O.L.S. Bingham in 1915, and under these instructions the township was to be resubdivided into lots of about 99.8 acres each, as against the former subdivision of 150 acres per lot. To do this, the former lines were to be adhered to, while what was formerly two concessions was to be subdivided into three concessions, thus involving the adhering to certain of the former concession lines, obliterating others, and opening certain new ones. The following report is submitted as to the work done.

The lines between Concessions 3 and 4, 9 and 10 and 15 and 16 were run and posted in the original survey and, as these are now blind lines in the new survey, all the posts on these lines were removed and destroyed, and their accompanying B.T.'s destroyed. New posts were planted on these lines at the east and west sides of the side road allowance.

The lines between Concessions 6 and 7 and 12 and 13 were also run and posted in the former survey, and, as these lines are being adhered to, the original posts thereon were recarved to show the new concession numbers. Similar treatment was given to the original posts on the south and north boundaries of the township, and on these lines common to both surveys the fronts of Lots 28 were chained, and posted midway to divide Lot 28 into Lots 28 and 29.

The new concession lines cut were those between Concessions 2 and 3, 4 and 5, 8 and 9, 10 and 11, 14 and 15, and 16 and 17. These were run in pairs as follows:—

The first mentioned two were run westward through the township from the east boundary, the second two were run west and east from the 25th side line, while the third pair were run west from the east boundary. The side lines were not re-chained throughout their length, the block depths as per the former survey being assumed correct. A chainage was, however, made at each side line to ascertain the depth between the new concession lines, and those of the former survey being abandoned. The survey was thus fairly well under control, though, as stated, no re-chainage was made to prove the correct residuary depths along the side lines.

On the north boundary of the township it was found that there had been no post planted, at nor-west of the 18th side line, by the surveyor in his original subdivision, and so this portion of the boundary was opened out and posted. It was also found that, on the north boundary, the original stakes marking the north-east angles of Lots 16, 17, 18 were, in each case, 10 chains too far east, and these errors were corrected.

Iron posts were planted, at certain specified positions throughout the township, and these positions are indicated both on the plan and in the field notes.

In the field notes returned you will observe that for all the lines save those newly cut, the notes of O.L.S. Bingham have been copied for topography as well as chainage and bearings; while full original notes are included for the new work performed by my party.

The lines were well cut out and thoroughly blazed, bearing trees clearly scribed, and full-sized posts firmly seated.

GENERAL FEATURES.

The township of Owens will be found to lend itself very naturally to farming, there being fully 90 per cent. of the land well drained and tillable, and the soil of a loose texture clay loam. There are no rough nor rocky areas, the other 10 per cent. of the area being, for the present, rather wet. There are numerous small streams cutting through the township, and two branches of the Lost River in the north-west quarter of the township are quite fair sized rivers. The Kapuskasing River flows northerly through the south-east corner of the township, and these streams will render much aid to the transporting of pulp wood to the track of the National Transcontinental Railway, which traverses the north-east corner of Owens.

TIMBER.

The timber burden is almost entirely spruce, some few large whitewood occurring on certain of the uplands. Along the streams the white spruce attain at times to a butt measurement of 20 inches, while inland the timber is of good commercial size for pulp wood.

MINERALS.

No exposed rock was encountered during the progress of the survey, and no economic minerals are known to exist within the limits of the township.

Accompanying this report are the usual returns, consisting of plan and tracing, field notes, etc., etc., all of which is respectfully submitted,

I have the honour to be, Sir,

Your obedient servant,

(Signed) H. M. ANDERSON,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ont.

Appendix No. 23.

SURVEY OF THE TOWNSHIP OUTLINES ON THE SOUTH SIDE OF UPPER ABITIBI LAKE, IN THE DISTRICT OF TIMISKAMING.

PEMBROKE, September 28th, 1918.

SIR,—I beg to report that I have completed survey of township outlines on the south side of Upper Abitibi Lake, in the District of Temiskaming, under instructions from your Department, dated April 20th, 1918, and beg to submit the following report.

I left the Transcontinental Railway at Low Bush and proceeded by boat to the mouth of the Ghost River, and proceeded up that river by canoes to trail from McCool Creek to the east boundary of Indian Reserve, which I followed to posts at the south-east corner of Reserve planted by J. H. Shaw, O.L.S., from this point I ran south, a distance of thirteen chains and sixty-eight links, and then ran my base line east a distance of two miles, seventy-nine chains and twelve links, where I planted $1\frac{3}{4}$ -inch iron bar and spruce post establishing corner of Rand, Garrison, Harker and Lamplugh townships, from this my first meridian was run south to Newman's base line and north to the Abitibi Lake. I then continued my base line east to intersection of production of line between Harker and Holloway townships, moving Newman's iron post north a distance of thirteen chains and sixty-three links and planting it along side spruce post in cairn of stones marking the corner of Lamplugh, Harker, Holloway and Frecheville townships, from this post by second meridian was run north astronomically to Abitibi Lake. I then continue by base line east to the boundary line between Ontario and Quebec, intersecting same at a distance of thirty-two chains and eighty-five links north of the sixty-seventh mile post, where I planted $1\frac{3}{4}$ -inch iron bar alongside spruce post in pile of stones. I then proceeded to the corner of Tannshill and Dokis townships, on Newman's base line, and ran my third meridian north to intersection with my base line, where I planted $1\frac{3}{4}$ -inch iron bar alongside spruce post marking corner of Frecheville, Holloway, Marriott and Stoughton townships, and

continued this meridian north to the south side of Abitibi Lake, where I planted $1\frac{3}{4}$ -inch iron bar along side spruce post, at a distance of thirty links from high water mark.

Along the base line forming boundary of Rand and Garrison townships the soil is of good clay, fairly level, suitable for agricultural purposes, timbered with spruce and balsam from 4 to 12 inches in diameter with some white birch and poplar in places, and similar conditions prevail along base line between Lamplugh and Harker townships as far as Ghost River, after crossing which the ground is rolling and rising to the foot of Ghost Mountain, the latter being crossed just south of its summit at an elevation of about six hundred feet above lake level. The base line continues through a broken, hilly country, with frequent rocky knolls unsuitable for agricultural purposes, the timber being principally white birch, spruce and balsam, with thick alder underbrush, till we reach the corner of Lamplugh, Harker, Holloway, and Frecheville townships, which is situated about the south-west corner of Lightning Mountain, continuing along the base line forming boundary between Frecheville and Holloway townships, the country is rolling and broken with frequent outcrops of rocky knolls from thirty to one hundred feet high, timber being principally white birch up to fifteen inches in diameter, with spruce, balsam and poplar prevailing in the level areas between ridges where soil is mostly clay; continuing along the boundary between Stoughton and Marriott townships the land gradually improves for the first mile and a half until we enter a fairly level section of good clay soil extending to the inter-provincial boundary, timbered with balm of gilead, poplar, spruce and balsam, with very thick underbrush.

Along the first meridian forming boundary between Garrison and Harker townships from Newman's base line north for the first two miles the land is fairly level but sandy and stony in places, with low ridges from twenty to thirty feet high, higher ground being reached on the third and fourth miles, but falling again to where we cross what I think is main branch of Ghost River, the timber being principally spruce on lower levels with white birch and balsam predominating on higher land, and is not suitable for agricultural purposes. From branch of Ghost River north to my base line the soil is of good clay, suitable for agricultural purposes.

Along line between Rand and Lamplugh townships, after leaving base line, the land is rolling and sandy for a mile and a half till we approach Ghost River, along which the land is low and marshy in places to where meridian crosses river on the fifth mile, higher ground being met from there onward to Lake Abitibi.

Going north on second meridian between Lamplugh and Frecheville townships there is a sharp rise over the westerly end of Lightning Mountain and dropping at once over rough, rocky land to base of mountain about ten chains south of first mile post, the remainder of this meridian runs through fairly level land, marshy in places, adjoining Lightning River, which is crossed on the fifth mile, timber being principally spruce, with white birch and balsam on the higher ground.

Going north on the third meridian between Holloway and Marriott townships from Newman's base, the first mile is through level clay land with heavy growth of spruce and balsam, then we passed through rolling land with sandy ridges till we reached the base line, and continuing north along line between Frecheville and Stoughton we met with fairly good agricultural land, timber being chiefly spruce and balsam with scattered poplar, and crossed an old brûlé on the fifth mile.

From what I could see off the base line, the townships to the south appear to be broken and hilly with considerable areas of spruce swamp, and that to the north is not so broken. There appears to be some good land along Ghost River in Rand and Lamplugh Townships, and along the Matawasagi River in Stoughton. Taken as a whole the area covered by this survey is chiefly valuable for its spruce timber and has not sufficient good land to warrant development along agricultural lines.

No indications of economic minerals were found, but the rock formation and mineral resources were fully investigated this summer by the Department of Mines.

Ghost, Lightning and Matawasagi Rivers are all sluggish streams, the last mentioned being the largest and is navigable by boat of light draught for about four miles from Lake Abitibi. Ghost River is next in importance and is navigable by canoes for about a mile south of base line, it flows through a march, about three miles long and from twenty chains to one-half mile in width, in the south-westerly portion of Lamplugh Township.

Frequent observations for azimuth were taken and substantial wooden pile post planted, with $1\frac{3}{4}$ -inch iron bars properly marked alongside wooden posts at township corners and $\frac{1}{4}$ -inch bars at the three mile posts, the lines being well cut out and trees blazed.

Moose are very plentiful, but the fishing in rivers is not good as far as our experience went.

Accompanying this report are field notes, a general plan, and account in triplicate.

I have the honour to be, Sir,

Your obedient servant,

(Signed) HERBERT J. BEATTY,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ont.

Appendix No. 24.

SURVEY OF THE TOWNSHIP OF IDINGTON, IN THE DISTRICT OF ALGOMA.

THESSALON, June 1st, 1918.

SIR,—In accordance with your instructions, dated October 24th, 1917, I have made a survey of the Township of Idington, in the District of Algoma, and beg to submit the following report.

This township is bounded on the east by the Township of Williamson, at present unsurveyed, on the west by the Township of McCrea, which was sub-

divided some years ago, on the north by the unsurveyed Township of Neely, and on the south by the unsurveyed lands of the Crown. The north boundary of this township was run in 1900, being part of the base line run by O.L.S. Niven in that year. The east, west and south boundaries were run in 1906 by O.L.S. Niven.

The Township of Idington was surveyed into lots of 100 acres or thereabouts, the dimensions of the regular lots being 25.25 chains frontage by 39.60 chains in depth. There are 18 concessions, and 28 lots in each concession, lot 28 being wider than the other lots. A road allowance one chain in width was surveyed between every second concession, that is between concessions 2 and 3, 4 and 5, 6 and 7, etc., the line being run in the centre of the road allowance. Similar road allowances were also surveyed between Lots 6 and 7, 12 and 13, 18 and 19, 24 and 25, the side lines being run in the centre of the road allowances.

The survey was started on November 4th, the party having arrived at Harty station, on the National Transcontinental Railway, the night previous. The south-east corner was located, this point being marked by an iron post planted by O.L.S. Niven, and a distance of 80.20 chains was measured northerly along the east boundary, from this iron post, to the centre of the road allowance between Concessions II and III. This gave to each concession a depth of 39.60 chains and allowed for half the width of the road allowance on the south boundary, and on the front of Con. II. At this point an observation was obtained on Polaris, which showed O.L.S. Niven's meridian to be correct. From this point a line was run westerly on a nine-mile cord, down the centre of the road allowance between Concessions II and III, to the centre of the road allowance between Lots 6 and 7, giving each lot a frontage of 25.25 chains, and leaving half the width of the road allowance along the east boundary. The side line between Lots 6 and 7 was run south to the south boundary and then north across the township to the north boundary of the township. This line was used as the base for the survey, all concession lines being started from it and run east to the east boundary, and west to the west boundary.

Each concession line was run as a nine-mile chord, and the side lines were run as true meridians. All the lines were run with a transit, and observations were taken on Polaris every clear afternoon. For this purpose a sidereal watch was carried, and the astronomical tables supplied by the Department of the Interior were used and found to be of great assistance.

Excepting for the fact that the regular concessions are of a depth of 39.60 chains instead of 59.50 chains the township was surveyed in a manner similar to the other nine-mile townships in the Clay Belt. The posts marking the corners of the lots are planted 50 links from the line run down the centre of the road allowance, and a guide post was left on the line opposite the corner at the front of each lot, and at the point where the side and concession lines intersected. These posts were all of the most durable wood obtainable, and were carefully marked with a scribing iron. Bearing trees were marked and noted in the field notes wherever possible.

A road allowance one chain in width was laid off along the shore of every lake encountered during the survey and also along each bank of the Opazatika River. A similar road allowance was laid off on each side of the National Transcontinental Railway.

The Opazatika River, and the above mentioned lake were all traversed on the ice, by transit and chain, and the details of the traverses are shown in the field notes.

In order to make the survey more permanent, 25 iron posts were planted, in addition to iron posts planted on previous surveys. The iron posts are each $1\frac{1}{4}$ inches in diameter, and were planted at the following points:—

S.W. corner	Lot 12,	Concession	I	S.W. corner	Lot 18,	Concession	XI
S.W. " " "	6	"	III	S.W. " " "	28	"	XI
S.W. " " "	18	"	III	S.E. " " "	1	"	XIII
S.W. " " "	28	"	III	S.W. " " "	12	"	XIII
S.E. " " "	1	"	V	S.W. " " "	24	"	XIII
S.W. " " "	12	"	V	S.W. " " "	6	"	XV
S.W. " " "	24	"	V	S.W. " " "	18	"	XV
S.W. " " "	6	"	VII	S.W. " " "	28	"	XV
S.W. " " "	18	"	VII	S.E. " " "	1	"	XVII
S.W. " " "	28	"	VII	S.W. " " "	12	"	XVII
S.E. " " "	1	"	IX	S.W. " " "	24	"	XVII
S.W. " " "	24	"	IX	N.W. " " "	18	"	XVIII
S.W. " " "	6	"	XI				

The lines are all well cut out and blazed, and every precaution taken to see that the instructions were properly carried out. As the survey was not completed until the end of January, difficulty was experienced in some cases, in getting the posts firmly planted in the ground. The chainmen carried a double-bitted axe, and a hole for each post was chopper below the frost line.

The Township of Idington, as a whole, should be a good one from an agricultural standpoint. It is conveniently located, as the National Transcontinental Railway runs through the middle of it from east to west, and there are two stations within the township. Harty station is near the east boundary, and Opazatika station is near the west boundary. The whole township is gently rolling or level clay land, resembling that in the best parts of the Clay Belt. The lower portions are rather swampy, being covered with deep moss which retains the moisture. There is a great deal of fairly high land, however, sufficiently rolling to afford natural drainage. The Opakatika River runs through the north-westerly portion of the township. The banks of this river are low, and the land for a distance of half a mile to a mile back from the river is very wet, and so low and flat that drainage will be very difficult. The line between Concessions 14 and 15 runs through low swampy country for almost its whole length, and the portions of the township most suitable for immediate settlement are south of this line and east of the Opazatika River. The timber plan accompanying this report shows this fairly well, as the approximate location of the swampy portions and of the higher lands are shown in colors. A considerable portion of this township has been burnt over. These portions are also indicated on the plan referred to. The north-westerly portion of the township was over-run by fire about two or three years ago, and the timber is now beginning to fall. The burnt areas near the railway were probably burnt over during the construction of the railway, and are now covered with an almost impenetrable mass of windfalls. In Concessions 1, 2 and 3 there are some burnt areas which are apparently the result of earlier fires, as the timber is nearly all down, and much of it rotted away, so that these portions could be easily cleared. These areas are probably extensions of the large brule which is reported to exist further to the south, where fire is said to have swept a very large area some years before the railway was built.

The township is well timbered with spruce and balsam on the low ground, and spruce, balsam, poplar and birch on the higher areas. A large part of this township appears to have been burnt over ninety years ago, and is covered with a matured second growth. This old burn is fairly distinct from the rest of the town-

ship, and may be said to consist of that portion of the township previously mentioned as being best suited for immediate settlement, although it is difficult to lay down any exact limit, as portions of the original forest exist within the limits of this area, and evidences of this old fire were seen along the north boundary of the township. The timber growth on this area is fairly thick, but with very little spruce over nine or ten inches in diameter. The timber, however, is long and straight, and of excellent quality for pulpwood, of which there is a very large amount. On this area there is not so much underbrush, and the moss is not so deep. On the large swamp areas previously mentioned, the timber is mostly small, and in some places very sparse, there being several large areas of open marsh, particularly along the Opazatika River.

The Opazatika River is the largest stream, being about three chains wide, and flowing with a gentle current. There are also a couple of good sized creeks on the easterly side of the township which probably flow to the Kapuskasing River. There are several small lakes, the largest being Bear's Tooth Lake, which is about three-quarters of a mile long, with low swampy shores. There is one small island in this lake.

Game was very scarce. A few moose were seen on the high ground north of Harty station, but rabbits and partridge were conspicuous by their absence.

Enclosed herewith you will find field notes, a general plan mounted on cotton, a timber plan on tracing linen, and accounts in duplicate.

All of which is respectfully submitted.

I have the honour, to be, Sir,

Your obedient servant,

(Signed) JAMES S. DOBIE,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ont.

Appendix No. 25.

REPORT OF SURVEY OF LADY EVELYN LAKE.

TORONTO, 26th September, 1916.

SIR,—We have the honour to submit the following report on the survey of the Mattawapika River and Lady Evelyn Lake and Islands therein, in accordance with instructions from your Department, dated 6th January, 1916.

Preparations for the work were made upon receipt of the instructions, such as getting equipment made and supplies ordered and shipped to Latchford, but owing to the unfavorable weather conditions in January, starting the work was somewhat delayed. On 24th January we went to North Bay, Temagami, and Latchford, to make arrangements for men suitable for this kind of work, and arranged for the transportation of supplies.

The party was in charge of Mr. A. T. Ward, O.L.S. Two surveyor's assistants were taken from Toronto, and the other necessary helpers were engaged as near the locality as circumstances would permit. Having organized our party to start inland from Latchford, where we were joined by the Crown Timber Estimator and his assistant, from Sudbury, we started from there on 1st February, proceeding up Bay Lake and the Montreal River, as far as the dam on the Mattawapika River. We were able to take a freight team with our supplies and outfit to this point, where our survey proper commenced.

We commenced our survey from a post planted by O.L.S. Blair, in front of Lot 9, Concession 5, Township of Barr, distant thirty-two chains west from the south-east angle of that lot, fixing the position of the Mattawapika Dam. The traverse lines were measured on the ice and were as close to the shore as practicable. Numbered pickets were put out at every five chains for the use of the Timber Estimator. Offsets to the shore were measured from these pickets, and a contour line, ten feet above the water level, was noted. Some difficulty was met with, owing to certain parts of the Mattawapika River being open. This was overcome by stadia readings. Station pickets were put at angles in the traverse lines and numbered consecutively. All previously established township outlines and points which could be found were connected with our traverse lines, and in addition, such mining claims, both on the main land and islands, as could be seen, were noted and connected with our survey.

We continued our survey up the Mattawapika River and Lady Evelyn Lake, in the aforesaid manner, and completed the work at the Falls, being the outlet of the Diamond Lake, on the 1st of April. During the last week in March we had almost continuous rain, which greatly impeded the field work, and was the cause of an early opening up of the rivers and creeks, thus bringing about a sudden termination of our survey.

ISLANDS.

All islands were located and those of sufficient size to require it were traversed, and all were numbered consecutively from No. 1, with the prefix of the letter "E," in accordance with instructions. The designations of islands were marked on trees at prominent points. These trees were selected where possible above the contour line, also for their durability and prominence, and the description and position of each is shown in the field notes. In all, ninety-nine islands were surveyed, varying in size from one quarter of an acre to one hundred and eighty-five acres.

CONTOURS.

Prior to leaving Latchford, we ascertained the elevation of the Montreal River, as indicated by the Government bench mark on the dam at Latchford.

We painted a bench mark on the rock immediately above the dam on the Mattawapika River, at an elevation of 950 feet above mean sea level, based upon the Government datum as previously ascertained at Latchford. The water level of the river above the dam was found to have an elevation of 938.46 feet.

Ten foot contour lines were fixed accurately where the shores were rocky or gradually rising, but on certain parts of the Mattawapika River where large areas of low swampy land interspersed with ridges and knolls were found, compass traverse lines were run in the swamps and the contour lines located approximately.

To obtain absolute results would require a much longer time and a larger party than we had at our disposal.

TIMBER.

We did not go into details as to the timber affected, as this was attended to by an official from your Department.

WATER,

The area of the water in the Mattawapika River and Lady Evelyn Lake was found to be eighteen square miles and ninety-hundredths of a square mile. An additional area of seven square miles would be obtained should the waters be raised to the ten foot contour line, thus making a total twenty-five square miles and ninety-hundredths of a square mile.

In Willow Island and Suker Gut Lakes we have enlarged a geological map, scale four miles to the inch, to twenty chains to the inch, and find the area to be two square miles and ninety-three-hundredths of a square mile, but this is very approximate.

As before stated, we have no means of knowing to what extent this area would be increased by raising the water to the present contour line. By enquiry from the natives, we were informed that a considerable area of low land lies adjacent to these lakes.

The falls at the outlet of Diamond Lake was found to have an elevation of ten feet and two inches.

GENERAL REMARKS.

The sudden and early breaking up of winter interfered with a detail survey of Willow Island and Suker Gut Lakes, which we contemplated, and had made preparations for, on receiving verbal instructions from the Inspector of Surveys from your Department.

Since the construction of the Mattawapika Dam, what was formerly known as Willow Island Falls, is now reduced to small rapids. These rapids are at the outlet of Willow Island and Suker Gut Lakes, and at the extreme west end of Lady Evelyn Lake. We were unable to make a survey of these waters owing to the breaking up of winter, and cannot tell to what extent raising the water would affect these lakes.

In the vicinity of the north-east angle of the township of Dane there were several mining claims staked out, and we understood that there has been some development work done. On account of the depth of snow, it was impossible for us to find out if there were any veins or development work done, which would be affected by the raising of the waters another ten feet. We thought it well to call attention to this fact, in case a claim might be made for damages sustained.

By travelling early in the morning and overland through the woods, we reached Latchford on April 5th, where the party was paid off and disbanded.

Accompanying this report is a plan on tracing linen, on a scale of twenty chains to the inch, in four sections, showing the existing shore line at the present water level, with contour lines about ten feet above that level, and traverse lines and station numbers thereon; also field notes on departmental paper, showing the

astronomical courses and lengths of all traverse lines with offset distances to the shores and contour lines; and field notes showing traverse lines of all the islands, numbered consecutively.

We have the honour to be, Sir,

Your obedient servants,

(Signed) SPEIGHT & VAN NOSTRAND,

Ontario Land Surveyors.

The Honourable the Minister of Lands, Forests and Mines,
Parliament Buildings, Toronto.

Appendix No. 26.

TORONTO, January 22nd, 1919.

To the Honourable the Minister of Lands, Forests and Mines, Ontario.

SIR,—I beg to submit herewith a report of operations conducted by this Department under the Northern and Northwestern Ontario Development Act—Amending Acts, 1916 and 1918.

LOANS TO SETTLERS.

Up to October 31st, 1918, a total of 1,839 applications for loans have been received, asking for a total amount of \$699,755.00, an average of \$380.51 per application. These were given careful consideration, and in all cases where *bona fide* settlers have shown actual need of financial assistance this Department has been pleased to co-operate, providing existing improvements to land warranted an advance, and it was clearly demonstrated the money was to be used to advantage in improving the property, or the living condition of the settler and his family.

A total of 1,305 loans have been issued to settlers, amounting to \$407,286.00, the average loan being \$312.10, and the development noted throughout the various districts in the way of increased land under cultivation, improved buildings, and larger holdings of live stock, would clearly indicate that good use has been made of the loans received and that settlers have been able to devote more of their time to work on their own lots in clearing up land, but the scarcity and high cost of labour for this class of work considerably retarded advancement along this line. The higher price of building materials, and live stock, prevented the new settler from accomplishing much over and above the result of his own labour.

Repayment of loans has been very satisfactory, in spite of adverse weather conditions for harvesting in some districts. This is evidenced by the fact that 90 per cent. of the interest payments have been received, and payments on account of principal, through payment of some loans in full, equal 99 per cent. of payments due.

LOANS TO CREAMERIES, ETC.

While a number of enquiries have been made and considerable correspondence carried on, the only loan issued of this nature, has been to the Sudbury Co-operative Creamery Co., Ltd., in an amount of \$12,000.00. This was granted in July, 1918, and has apparently placed the institution on a good working basis; their operations having been carried on successfully during the year and the prospects are good for much better results in 1919, and consequently a greater benefit to the dairy industry, in the district served by the creamery. Other loans to creameries, cheese factories, and grist mills no doubt will be required, as there are a number pending, but matters are not yet in shape for the submission of formal applications.

In conclusion would direct your attention to attached detailed statement and would say that the general benefits derived by settlers from their ability to receive small loans from the Department on easy terms has often been expressed by individual settlers and is self evident from their improved conditions.

MEMORANDUM OF APPLICATIONS RECEIVED AND LOANS ISSUED
TO OCTOBER 31ST, 1918.

APPLICATIONS.

Number of applications received	1,840
Amount applied for	\$711,755 00
Average per application	\$380 51

LOANS.

Number of loans issued	1,306
Amount granted	\$419,286 00
Average loan	\$312 10
Total acreage covered by liens	200,254
Total acreage improved land	27,585

NOTE.—Figures, except averages, include application for and loan of \$12,000.00 to Sudbury Co-operative Creamery Co., Ltd.

REPAYMENTS.

Accrued interest due	\$25,282 38
Accrued interest received	22,683 23
Payments on principal due	29,315 48
Payments on principal received	29,020 63

Total amount of loans and accrued interest outstanding, \$392,864.52.

Yours very truly,

F. DANE,

Settlers' Loan Commissioner.

Appendix No. 27.

ALGONQUIN PARK, November 1st, 1918.

HONOURABLE SIR,—I beg to hand you my report for the fiscal year ending October 31st, 1918, under much happier conditions than my last report owing to the fact that the war that for years has been sapping the best life of the Empire is fast drawing to a victorious close.

We have had the usual staff of rangers, and they have been employed in various ways during the past year.

In November last you decided to have them take out a number of deer from the sections convenient to the railways, to be shipped to Toronto and other points to help out the meat supply. This was done, and several of our best men given the task of shooting and bringing to the railway the deer from different points. This represented a good deal of hard work, but our rangers did it creditably and some 650 deer were taken and shipped to Toronto and Hamilton. The net weight of the venison was 59,082 lbs., which sold for \$5,090.34. The deer were taken mostly from near headquarters, Joe Lake and Brulé Lake sections, a few coming from the Canadian Northern in the northern section of the Park. The venison found a ready market and was, I believe, much appreciated both in Hamilton and Toronto. It was also decided to take out a quantity of fur. This was done mostly by the same men who took out the deer and a fine lot was sold, bringing \$9,008.25. This was disposed of at public sale at the Parliament Buildings, Toronto, as usual, and was made up of beaver, otter, mink, marten, fisher and muskrat. As far as possible, the meat of the beaver, which by the way is excellent food, was saved and shipped to Toronto where it was in demand and brought a good price. Of this, 2,404 lbs. were shipped, the price received for which was \$240.40.

In the spring it was decided to take out a quantity of mullet from the lakes near headquarters, where they had become very numerous, much to the detriment of the better fish, and five tons were taken out and shipped, bringing \$129.20. I would recommend taking out a like quantity next spring from here and Joe Lake. The trout and bass are caught each year and the mullet left, with the result that they very much predominate and as they are spawn eaters they are under existing conditions a detriment.

It was also determined to take out a large quantity of hardwood in view of the fuel shortage, and in compliance with your instructions, camps were built, a drag-sawing machine and engine bought, and as many of the rangers as could be spared were allotted to this work. The wood was cut on one of the hardwood ridges west of Cranberry Lake and everything was cut, the brush and debris being well piled with a view to burning in the spring, when the whole will be cleaned up and seeded to hay for use of headquarters, etc. Several hundred cords of wood were cut by the rangers, when owing to the scarcity of men on the Grand Trunk Railway it was found necessary to detail our rangers to build the sidings required at several points in the Park for loading wood. This, of course, put a stop to the wood cutting. Three sidings were built, one at headquarters, one at Source Lake and one at Potter Lake, at both of which latter points the Government had given large contracts for taking out wood. By the time these sidings were completed, it was necessary for our men to return to their respective sections as the trappers had become busy, knowing the rangers were off their beats, and men

were hired to take their place in the wood-cutting camp and are continuing the work there.

I am glad to report there were no forest fires last year. Several were started along the railway, but with the telephone and the railway tank here at all times in readiness, they were gotten under control at once. The cleaning up along the railway also was a great assistance at these times, and no fires were allowed to reach the woods.

Owing to the fact that our rangers were otherwise employed, not many portages were cut or shelter houses built. One good shelter, however, was put up on the line of the Canadian Northern Railway near Francis Lake. There have not been any serious infringements of the law during the year, so far as the Park is concerned.

The old Indian, Francis Dufond, at Manitou lake died this fall, and I believe his old wife intends to move out to Mattawa as soon as the ice takes. This will leave the farm vacant, and as it is a rendezvous for the Indian trappers from Mattawa, I thought of stationing a ranger there. There are, as you are aware, a large clearing and several buildings on the farm, which belongs to the Government.

We have had a great many visitors to the Park, the Highland Inn and other hotels being filled to overflowing, and many had to be refused accommodation. They were mostly health seekers or parties who came for rest, many returned men among them who received genuine benefit from a stay here. With the war drawing to a close, we look for a return of our young men and sportsmen next year, who have been deterred from coming in the past on account of it.

A number of new leases have been granted and all the cottages on the lake were occupied. The boys' and girls' school camps, too, were filled up as usual, many of the parents staying at the Inn.

The Government did a lot of work on the road from headquarters to Big Island lake, and I trust this will be completed next year. It will be a stretch towards a trunk road through the Park, which will be a great convenience and afford much pleasure to visitors.

The fishing has been very good and some splendid trophies have been taken out by anglers. I hope some day to see a hatchery established here, not only to keep the Park waters replenished, but to supply the many lakes and rivers in the Province, especially to the east of the Park. A number of hybrids were taken this year, being a cross between the lake trout and the speckled trout, having the forked tail of the former and the red spots of the latter.

As there is likely to be a good demand for lumber of all kinds in the near future, I would strongly recommend some means being taken to manufacture the splendid hardwoods now mature on the limits acquired from the Munn people. There are vast blocks of the finest hardwood with an abundant growth of young timber coming on, and it would seem a great pity to let all this valuable timber decay and spread disease to the young growth. The woods would be benefited by a careful removing of the matured timber, and a large revenue could be derived from the same. The telephone line has proven a great benefit in many ways, especially in getting quickly to fires, also in the wood cutting operations, etc. It is a pity we cannot have further connection over the Bell line. At present we are confined to Orillia on the south and North Bay on the north. I am sorry to say work in this section, especially in the wood camps, has been very much handicapped by the outbreak of influenza, in some cases completely tying up the operations.

Game of all kinds is very abundant, and we expect a fine catch of furs during the coming winter and spring. Deer and moose are also plentiful, the number of the former taken out being from so small a section that it has had no effect whatever on the Park in general.

We have collected in rents here, \$467.50; for licenses, \$780.00; and for telephone, \$70.43, making a total of \$1,319.93.

These amounts do not include moneys paid direct to Toronto for rents, etc.

Yours very truly,

G. W. BARTLETT,

Park Superintendent.

*Honourable G. Howard Ferguson,
Minister of Lands, Forests and Mines,
Toronto, Ont.*

Appendix No. 28.

QUETICO PROVINCIAL PARK.

KAWENE P.O., ONT., OCT. 31ST, 1918,

SIR,

I beg to submit my report for the fiscal year ending October 31st, as follows:

I found it very hard to get suitable men for rangers, owing to the scarcity of labour and the unusually high wages paid for lumbermen, rivermen, etc.

During the season the fire-rangers on Quetico Park were a separate unit from the Park-rangers inasmuch as they were under a chief fire-ranger. Two small fires occurred during the season, one on the island in Lake La Croix. It ran over about 25 acres, but being a light surface fire did practically no damage. The other occurred about the time of the Minnesota fire on Marion bay, Basswood lake, but was confined to about eight acres covered with poplar, birch, etc. It seemed indeed at that time that it might be very serious, as the smoke from the Minnesota fires south and east of us was very dense.

During the summer I had built at Eva lake a boat-house and also a shelter for our waggon there. At headquarters I built a canoe shed of sided timber 14 by 22 ft. This affords ample shelter for canoes in winter and for sleighs, waggons, etc., in summer.

Repairs were made to huts on Lacroix and Basswood lakes. Owing to the gradual decay of the dam on the "Dawson trail" at the outlet of Pickerel lake built about fifty years ago, I found it necessary to build a dam on Deux Rivières, one of our main canoe routes, the water having become so low that it was nearly impassable. I had a road cut over-land from headquarters to the southwest corner of Eva lake, about $4\frac{1}{2}$ miles distant, thus avoiding two small lakes which occasioned us much trouble, as the ice used to become unsafe on them when still good on the larger lakes. Many other trails, portages, and canoe routes were cut and improved.

Game is very plentiful in the Park, red deer, partridge, and beaver particularly having increased very rapidly.

The larger lakes in the Park abound in fish such as trout, pickerel, whitefish and pike, and in my opinion a considerable quantity of these might be taken without any detriment to the lakes whatever, thus helping to relieve the food situation.

The Shevlin-Clarke Lumber Co. of Ft. Frances will no doubt operate largely on their limits in the Park this season. Their operations will be closely patrolled by competent rangers. I am pleased to say that the officers of this company co-operate heartily with us in the matter of Park regulations.

I am in receipt of many letters of regret from persons who intended to visit the park during the summer, but who owing to war conditions had to forego the pleasure.

I have the honour to be Sir,

Your obedient Servant,

HUGH McDONALD,

Superintendent.

HONOURABLE G. H. FERGUSON,

*Minister of Lands, Forests and Mines,
Toronto, Ont.*

Appendix No. 29.

COLONIZATION AND IMMIGRATION.

To the Honourable G. H. Ferguson, Minister of Lands, Forests and Mines, Toronto, Ontario:—

SIR,—I have the honour to submit the following report of the Bureau of Colonization for the fiscal year ending October 31st, 1918:

Number of letters received	5,008
Number of letters sent out.....	4,147
Northern Ontario literature circulated, including:—	
“A New Land Nearby”	} 17.656
“Greater Ontario”	
“Ontario” Handbook	
“Farming Opportunities in Ontario”	
“‘Heaton’s’ Opportunities in Ontario”	
“Hints to Settlers in Northern Ontario”	
Ontario Maps.....	1,236
Railway Certificates to settlers going to Northern Ontario	1,117

The work of this Branch for the year ending October 31st, 1918, was confined almost exclusively to advertising the great possibilities and opportunities in Northern Ontario held out to the prospective settler. About 5,000 people called at the office seeking information. The intention of most of them was to make the North their home after the war.

Although only about 380 settlers were placed in the different districts of the North during the year, this is a remarkable showing in view of the tremendous demand for all classes of people in every line of work throughout the war.

Our Northern Ontario exhibit at Toronto and at Ottawa was more largely attended than ever before. The one in Ottawa was considered by the Directors of the Central Canada Exhibition to be the chief feature of attraction. In addition



Breaking Land in Northern Ontario.



A Busy Haying Scene in Northern Ontario

to the fine varied display of the natural products of the North Country shown in the "Settler's Home" on the grounds, the Agricultural Department next door had, free to all, a moving picture show, exhibiting on the screen all the big industries in Northern Ontario, such as mining, lumbering and agriculture. They had also scenes of summer resorts, with lovely lakes and streams adjoining the hotels, and fish being drawn from the water by rod and line:

Now that the all-absorbing war is over, we look for a new influx of settlers into the gigantic land of great inducements entitled Northern Ontario. Its soil and climate are similar to Manitoba's; millions of fertile acres await the plough; immense profitable forests are ready for the axe and the lumber mill; great gold and silver and other mines are calling for further capital and labour; mighty water powers are proclaiming the coming day of utilized electric energy; and



\$100,000 Pile of Pulpwood in Northern Ontario.

fisheries and hunting fields are offering profit and fascination to romantic minds; thousands of miles of railway and colonization roads interlace the land; big industries are already going; demonstration farms, with district representatives, are there to instruct and aid the settler; and cities, towns and villages, with schools and churches, have risen and continue to rise, as evidences of modern civilization.

That vast land is near, it is within the bounds of the Province of Ontario, and it is 330,000 square miles in area, six times larger than England. Let the prospective settler look at it and consider it well. It is worth while.

Since the preceding paragraphs were written the armistice has been signed, and as one of its indirect effects the immediate outlook in regard to colonization has been changed in a very marked degree. In every programme of reconstruc-

tion, in every discussion of the problem of demobilization, the subject of land settlement is given prominence. It is surely quite natural therefore that a Department such as this, whose work all along has operated so largely in this field, should feel that it has an important part to play in the reconstruction period that we are now entering upon.

In several ways provision has been made to strengthen the organization of the Colonization Branch for the work that lies ahead. In this connection it is worthy of note that the Prime Minister has appointed Brigadier-General R. Manley Sims, C.M.G., D.S.O., to fill temporarily the position of Agent General in the British Isles rendered vacant by the death of Mr. Richard Reid. General Sims, who has had a distinguished military career, is especially well fitted for useful service in this important position at the present time, when the London Office is proving of such great service to our Ontario soldiers overseas, and those who are returning. Mr. J. P. Young, who served in the C.E.F., and who has been assistant secretary to the Prime Minister, has been appointed publicity representative in the Agent General's Office, where his long experience as a newspaper man in Canada and England will be used to make Ontario better known through the press, and to advertise as widely as possible among Canadian soldiers and others what is being done for returned soldiers in Ontario, besides conveying to them information regarding land settlement, employment and re-establishment generally.

The Newcomers' Inn in Toronto, which has done such a splendid work in the past among newly arrived British immigrants, and which is largely maintained by the Ontario Government, and administered by the Salvation Army, has been recently completely renovated and refurnished in readiness for use when the immigration business is resumed. Arrangements are also being made with the Federal Government to obtain space for an Ontario Immigration Office in the great new Union Station at Toronto, which is nearing completion. Being right on the spot, this will enable us to serve the incoming immigrants to Ontario even better than was possible in our old office on Front Street, where so many thousands of British immigrants, who have since become prosperous citizens of our Province, received their first welcome to Ontario, and were sent to employment.

From these features of our present development it will be seen that the Colonization Branch anticipates taking no insignificant part in the upbuilding of our great and rich Province during the coming year of peace, repatriation, and reconstruction.

I have the honour to be, Sir,

Your obedient servant,

H. A. MACDONELL,

Director of Colonization.

*Appendix No. 30.*REPORT ON THE CONSTRUCTION AND MAINTENANCE OF HIGHWAYS AND BRIDGES
UNDER THE PROVISIONS OF THE NORTHERN AND NORTH WESTERN
ONTARIO DEVELOPMENT ACTS OF 1912 AND 1915.

(During the Season of 1918)

To the Honourable, the Minister of Lands, Forests and Mines:—

SIR,—I have the honour to submit the following report of the work done on the Construction and Maintenance of Roads and Bridges under the provisions of the above Acts, during the season of 1918:—

Operations were carried on in the Districts of Rainy River, Kenora, Port Arthur and Fort William, Sault Ste Marie, St. Joseph Island, Manitoulin Island, Algoma, Sudbury, Nipissing, Parry Sound, Muskoka and Renfrew.

In the Eastern part of the Districts the work throughout almost the entire summer season was considerably retarded by the damp or rainy weather in the Western Districts in the vicinity of Port Arthur. In the Valley of the Rainy River and in the District of Kenora the weather conditions were very favourable—comparatively dry weather. Labour, however, was difficult to procure in all the Districts, wages high and food supplies for men and teams expensive. Those engaged on the work were chiefly settlers where they could be procured. In the Agricultural districts during the periods of seeding, haying and harvesting, operations were suspended, in order to convenience the Settlers who wished to work on the roads. Very fair results were obtained throughout the season for the money expended. During the past season fewer miles of new roads were cut out than in previous seasons. Much of the work was confined to the re-construction and maintenance of old roads, by grading, improving and surfacing with either gravel or stone. The maintenance alone of trunk roads constructed within the last six years within the area covered by this season's work was no small task. Over 500 miles had to be looked after, dragged, re-surfaced in places and repaired. No new roads were cut out this season in advance of settlement; in many instances settlement is now considerably in advance of our roads. It was found, however, that in most instances the settlers were quite willing to forego all the comforts that might be derived from new roads during the war, but are living in hopes of relief as soon as conditions improve. During the past season, up to the 31st of October, Three hundred and forty-five thousand dollars was expended on the construction, repairing and maintenance of roads or bridges in the above mentioned Districts.

There is a growing demand by the settlers and business men in Northern Ontario for more roads and better roads. The earth or clay roads of the past will not satisfy them. Motor Cars and Trucks are rapidly becoming the vehicle of the day, and unless the roads are well surfaced with gravel or stone, and of a more permanent character, they will not meet the requirements. There is still, unfortunately, too little interest taken by the users of the Government Constructed roads in their maintenance or upkeep—and unless some legislation is passed in the near future, making it incumbent on the Municipalities through which these roads pass to contribute towards their maintenance they will become a considerable burden on the Province, or will soon become impassable in sections. The public all appreciate good roads, but are apparently not very willing in certain localities to con-

tribute towards their maintenance. Where good roads have been constructed in new districts, correspondingly good improvements on the land are being made by the Settlers. If, in the near future, there is any considerable immigration into Northern and North Western Ontario a considerable increase in road expenditure will be necessary in order to keep up to or slightly in advance of settlement.

During the past season considerable work was done on the North Bay and Bracebridge Trunk road. It has been partly completed to a few miles south of the town of Huntsville. A road was also re-constructed between Powassan Station on the Grand Trunk Railway West of Nipissing Village, a distance of over 10 miles. This road gives relief to a large settlement far distant from Railway facilities. Another season's work on the North Bay & Bracebridge Trunk Road will open a good motor car road between Old Ontario and the town of North Bay. It will take another season's work to surface with gravel all of the Trunk Road between the town of North Bay and Sudbury. Between Sudbury and Sault Ste. Marie there is still a gap of about 17 miles to be constructed between Cutler Station on Canadian Pacific Railway and Algoma Mills. When this is completed it will be possible to motor between Toronto and Sault Ste. Marie. During the past season a macadamised road was constructed between Copper Cliff and the Creighton Mine. On the Manitoulin and St. Joseph Islands operations were carried on on leading trunk roads. These are being surfaced with gravel and well graded and drained. In the District of Rainy River many miles of Trunk Roads were re-surfaced with gravel, new roads cut out and graded, and several miles of large drains constructed. The Trunk Road System was extended between Wabigoon and Oxdrift on Canadian Pacific Railway in the District of Kenora. In the Districts surrounding Port Arthur and Fort William several of the previously constructed Trunk Roads were surfaced or re-surfaced with gravel, and several short roads constructed or improved in the Agricultural sections. A mining road was cut out from Schreiber on the Canadian Pacific Railway North into a new Mining District on Big Duck Lake.

Following is a more detailed statement of the roads constructed in the various Districts during the season of 1918; also a statement of expenditures, and an approximate estimate of expenditure for the season of 1919.

I have the honour to be, Sir,

Your obedient servant,

J. F. WHITSON,
Commissioner.

NORTH BAY TO BRACEBRIDGE TRUNK ROAD.
DISTRICTS OF NIPISSING, PARRY SOUND AND MUSKOKA.

Work was continued throughout the season on the North Bay and Bracebridge Trunk Road. It has now reached a point about 7 miles south of the Town of Huntsville. That part of the Trunk Road constructed from North Bay to Sundridge in previous years was gone over with the drag and re-surfaced in places where found necessary. Considerable gravel was used in re-surfacing and the ditches cleaned out. From Sundridge south to Burks Falls substantial new work was carried on. The distance between these two stations is about 13 miles; between Burks Falls and Katrine 4 miles; between Katrine and Emsdale 5 miles; from

Emsdale to Scotia Junction 2 miles: Scotia Junction to Novar about 6 miles: also about 7 miles of grading south of Huntsville.

The road between the Town of Powassan on the Grand Trunk Railway was re-constructed as far west as Nipissing Village, a distance of about 10 miles. Easterly, 7 miles of this road, leading out of Powassan was well graded and ditched and $2\frac{1}{2}$ miles of it re-surfaced with gravel. The balance of the road, 3 miles, was graded in places where required and gravel placed on the worse parts. 20 culverts of corrugated iron and cedar were placed where required. The bridge across South River, known as "Healy's Bridge," was re-constructed with new stringers and new flooring. While this road had been constructed many years it was in very bad condition. It opens up a large settlement where there is consider-



Northern Ontario Exhibit at Ottawa.

able good farming land. It requires a further expenditure to complete this road, as it should be extended considerably west of Nipissing Village.

The road between North Bay and Burks Falls was continually dragged and kept in good repair. Maintaining this road cost considerable, as the distance from North Bay to Burks Falls is about 60 miles.

The road between Sundridge and Burks Falls was re-graded and gravelled in places. The road was also finished between Katrine and Emsdale and $1\frac{1}{2}$ miles of it gravelled. From Emsdale to Scotia Junction, 2 miles, the road was widened out, ditched and graded, $\frac{1}{2}$ mile of it surfaced with gravel. From Scotia Junction south to Novar, 6 miles, 3 miles was widened, stumped, graded and $\frac{1}{4}$ mile of it gravelled. At Katrine the bridge was reconstructed across Doe Lake outlet. South of Huntsville, beginning about 2 miles from Huntsville, 7 miles was widened, ditched

and graded and 2 miles of it gravelled. 60 corrugated iron culverts were placed where required during the season on this road. A deviation was made, commencing at a point about $1\frac{1}{4}$ miles west from Sundridge, on a road known as the "Distress Road," running to the village of Magnetawan.

On these various roads, \$41,144.22 was expended.

ALGONQUIN PROVINCIAL PARK—DISTRICT OF NIPISSING.

During the season of 1916 a road was cut and graded in the Algonquin Provincial Park from the Algonquin Park Station, Grand Trunk Railway, northerly to Minesing Camp, a summer resort on Island Lake, a distance of 11 miles. The road became badly rutted owing to the fact that it had never been re-surfaced with gravel. The country through which this road passes is rolling, stony, and the soil a light sandy loam with small areas of clay soil in the swamps. When



A Temiskaming settler's first home.

the road was first constructed no gravel suitable for road purposes was available, the only road material used being a light loam. The road passes through a densely timbered section of the Park and the road originally was not cut out the usual width as it was only used as a tourist road; consequently there was little chance of the sun ever drying the road after the foilage came out. There is considerable traffic over this road during the tourist season, and also in the winter season hauling cord wood to the Railway Station.

During the season of 1918 the road was widened out in places, re-ditched and re-graded for a distance of $8\frac{1}{2}$ miles, and parts of the road surfaced with gravel for a distance of $6\frac{1}{2}$ miles. Owing to the very wet season and the difficulty in getting gravel slow progress was made on this road. The road so far as it has been completed is in a first class condition and is a very beautiful drive for tourists through an almost virgin forest heavily timbered with maple, birch, beech and iron wood. The road for several miles back from the Railway Station can in the future

be used in connection with hauling of hard wood to the Station for fuel purposes. Thirty new culverts were placed in this road and 1,750 yards of gravel used in re-surfacing.

\$13,722.79 was expended on this work.

NORTH BAY TO SUDBURY TRUNK ROAD—DISTRICT OF NIPISSING.

Operations were started on this work early in January, 1918. Near Warren Station on the Canadian Pacific Railway the road was re-surfaced with gravel east and west of this point for a distance of 9 miles, west as far as Liberty's Bridge about $4\frac{1}{2}$ miles and east about the same distance. 7,170 cubic yards of gravel were used in surfacing this section. About the same time a bridge was constructed over the Veuve River about $\frac{3}{4}$ of a mile west of Markstay Station. The bridge was built of cedar piles with white pine stringers and floored with tamarac planking.



A settler's buildings, Temiskaming.

A section of the road was re-gravelled near Wahnapiatae Station on the Canadian Pacific Railway. The road from Wahnapiatae Station to Sudbury was dragged and rolled with a 12 ton roller, after having it re-surfaced in places with crushed rock. During the summer season the road from North Bay to Sturgeon Falls was dragged. It was found, however, owing to the very wet season, difficult to keep this road in repair. That is, a section near Meadowside, where the road passes through flat country, the subsoil of which is quicksand. This section of the road will be required to be re-surfaced with gravel, which, unfortunately, cannot be found in the vicinity, before it will make a good permanent road. The road between Coniston Station and Sudbury has been dragged and rolled on two different occasions during the season and re-surfaced in a few places where it had become rutted.

Early in October a land slide occurred about 2 miles west of Warren on the bank of the Veuve River. About 260 feet in length of the road close to the bank dropped from 5 to 10 feet. This was owing to the washing out from under the

road bed of the quick sand. This had evidently been going on for years. The point is where the Veuve River turns at a sharp angle and the current strikes the bank. This has been repaired and took 2,500 cubic yards of rock to complete the work. About 2 miles further west on the same road, where the trunk road crosses the Veuve to the south shore, an old bridge which was constructed about 15 years ago gave way, both abutments became rotten and the bridge collapsed. A new bridge with stone abutments is now under construction with a clear span of 60 feet.

A road was explored from a point about 3 miles north of St. Charles near the south east corner of the Township of Dunnet, north to Hagar Siding on the Canadian Pacific Railway, a distance of a little over 3 miles, and cut out for a winter road, but not graded.

\$36,961.85 was expended on this road.



A view on the Sault Ste. Marie trunk road.

COPPER CLIFF AND CREIGHTON TRUNK ROAD AND OTHER ROADS IN THE VICINITY OF SUDBURY.

Early in February operations were started on the road from the Town of Copper Cliff to the Creighton Mine, a distance of about seven miles. The work was carried on on this road throughout the winter and well on into August. A first class waterbound macadamized road was constructed between these two places. Ten thousand and six hundred cubic yards of crushed rock were used on the construction of this road. The rock was procured from the Canadian Copper Company's Crushers at Creighton Mine and hauled by teams over the road. Between Copper Cliff Station and Naughton Station on the Canadian Pacific Railway, Soo branch, the Trunk Road, which was built nearly 10 years ago, was improved, regraded in places and surfaced with gravel in places. This road is still, however, in bad condition in sections, and will require to be re-graded and gravelled the coming season.

The Trunk Road between Sudbury and Azilda on the main line of the Canadian Pacific Railway was dragged and improved where required. A new road was cut out from a point on the Canadian Northern Railway about a mile north of Milnet Station westerly to the Sellwood Mines near the Village of Sellwood. This road was cut out, culverts built, and made suitable for winter traffic. The road was constructed with a view to letting the people in the vicinity of the Sellwood Mines have access to the main line of the Canadian Northern Railway.

A waterway into West Shining Tree, gold mining district, was improved by the construction of 3 dams to regulate the water for navigation purposes.

\$20,506.54 was expended on these roads.



Spanish River Lumber Company's mills and yard at Cutler, the western terminus of the Sudbury and Sault Ste. Marie trunk road.

SAULT STE. MARIE TRUNK ROAD, SAULT STE. MARIE TO ALGOMA MILLS—WORK PERFORMED DURING THE SEASON OF 1918.

On the above road, which has been constructed during the last six years, very little new work was required this season. The road has been surfaced with rock or gravel almost throughout the entire length, 102 miles, Soo to Algoma Mills. The road still, however, requires repairing and re-surfacing in places. During February and March of last season, 1,265 cubic yards of gravel was used in surfacing about $2\frac{1}{2}$ miles along the Mississauga River in the Township of Thompson.

The balance of the season's work on this road was chiefly in maintenance or repair work from the Soo to Algoma Mills. Early in the season the western part of the road, from the Soo to Garden River was re-surfaced with crushed rock, 578 tons were required; the balance of the road was kept in repair by an overseer employed to patrol the road from end to end, make such repairs as were

found necessary in the way of dragging, levelling, removing stones, filling ruts, opening up old ditches or culverts, repairing bridges, etc. This work was carried on very satisfactorily, so that during the season the road was kept in good condition. The amount of expenditure on this road during the past season was \$10,331.67.

ST. JOSEPH ISLAND, DISTRICT OF ALGOMA.

WORK PERFORMED DURING THE SEASON 1918.

Re-graded and surfaced with gravel	14½ miles
Ditches and offtake drains dug	2¼ "
Culverts constructed	29
Bridges constructed, 48' and 25' span	2
Roads brushed out	2⅝ miles
Roads dragged	15 "
Amount expended on above was \$17,960.99.	



A settler's home on St. Joseph Island, showing one of the trunk roads.

The work on the Trunk Road System as laid out on this island during the season of 1917 was continued.

The season was very favourable and good results were obtained notwithstanding the scarcity of labour during the haying and harvesting seasons. The Trunk Roads leading into the two Lakeport towns on the Island, Richard's Landing and Hilton are now in first class condition. There is still considerable work to be done in order to complete the Trunk Road System on this Island. Roads connecting the Trunk Roads leading into Richard's Landing and Hilton have yet to be constructed, and it will take another season's work to complete the system. The work that has already been done is of permanent character. The old existing roads had to be widened out, re-graded, ditched and surfaced.

Diversions were made in several places to avoid heavy grades. The road material found in different places throughout the island is of the very best quality. The roads constructed the previous year were dragged and a heavy roller passed over them so that now they are in A1 condition.

The following is a summary of the work performed on the island:

The 10th and 11th sideroad, Township of St. Joseph, across Concessions G. H. and I., $1\frac{1}{4}$ miles surfaced and across Concessions I. and K., 1 mile surfaced with gravel, and between I. and K. 5 turnouts gravelled; also 450 yds. gravelled in places across Concessions K., L., M., N., and O., and 100 rods of ditching done. The trunk road passing through the Village of Richard's Landing to the steamboat landing was well graded and gravelled. On Concession C. from the A. line easterly across lots 1 to 9 a distance of $2\frac{1}{4}$ miles surfaced with gravel; one cement culvert constructed, and the road ditched in front of lot 9. On the A. line from Concession D. north one mile and south 300 rods the road was surfaced with gravel and both sides of the road ditched for a distance of 350 rods. A stone culvert was constructed between Concessions G. and F., and a bridge constructed with 5 bents 48 ft. in length with stone abutments, and cedar and cement floor.

Six miles of road was graded and surfaced with gravel commencing at the Town of Hilton and extending easterly to the W. line and south along the W. line to Trainor's side-road. This road was well ditched, graded and gravelled. Sixteen hewed cedar culverts and one iron culvert were constructed. The right-of-way was widened and 4 offtake drains constructed.

On Concession U from the 5th side-road east the road was gravelled for a distance of $1\frac{3}{4}$ miles and for a distance of 350 ft. north on the 5th and 6th side-roads. Five culverts were constructed and a bridge at what is known as "Brown's Mill" was built of cedar, span 23 ft., cedar abutments filled with rock and planked with cedar.

MANITOULIN ISLAND.

ROADS CONSTRUCTED DURING THE SEASON OF 1918.

Number of miles of roads completed, graded and surfaced with gravel, $18\frac{1}{2}$.

Number of miles of roads repaired, partly graded, and gravelled, 10.

Total number yards of gravel used in surfacing, 10,000.

Eighteen culverts constructed and five small bridges.

The amount expended on this work was \$16,151.51.

Road construction work was commenced on Manitoulin Island early in July. The season was favourable throughout for working and good results were obtained notwithstanding the scarcity of labour. The only men employed on the work were settlers from the district.

Operations during this season consisted in re-constructing, grading, and surfacing with gravel part of the trunk road between the Town of Little Current and Gore Bay commenced in 1916, and the trunk road between the Towns of Little Current and Manitowaning, which passes through the Village of Sheguindah. This road was commenced this season. The distance between the two towns is about 24 miles, and $8\frac{1}{2}$ miles of this was completed this season. The road was straightened, brushed out and re-graded, ditched, and also surfaced with gravel. Ten miles of this road was brushed out or rather the road widened, ditched in places, and surfaced with gravel where it was most required. On the Little

Current and Gore Bay trunk road through the Townships of Howland, Allan and Gordon, $7\frac{1}{2}$ miles was widened out, ditched, graded, and surfaced with gravel. Eight culverts and 4 small wooden bridges and 1 small stone bridge were constructed. Six thousand yards of gravel was used in surfacing this section of the road, and 4,000 yards on the Little Current and Manitowaning section.

On the Little Current and Manitowaning road 8 culverts were constructed. The worst parts of this road have been repaired. The very best of road material was used as it is found in great abundance in many places along this road. The wooden culverts were made out of cedar and also the abutments for bridges where stone was not used.



Remunerative winter work, Northern Ontario.

DISTRICT OF THUNDER BAY.

In the Vicinity of Port Arthur and Fort William.

Operations were started in this district about the middle of March, gravelling and re-gravelling parts of the International Highway between Port Arthur, Fort William and Pigeon River, locally known as the "Scott" Highway. The work was commenced on the eastern boundary of the Township of Neebing, a couple of miles east of the Prison Farm and portions of this road, which had not been gravelled the previous seasons, or where the gravelling done last season was not sufficiently heavy, were gravelled or re-gravelled this season, as far south as the International boundary at Pigeon River. The ditches, where they were found insufficient to carry off the water, were deepened and widened. Several new culverts were constructed. The worst grades on the road were cut down and at Horn Hill, where a mountain slide carried away part of the bed of the road into the Pigeon River, the road was re-constructed. Heavy rains of the previous

season late in the fall of the year caused considerable damage on this road. There were many washouts caused by the freshets coming down the hillsides from the north side of the road, the road being built through a valley, with mountain ranges in places rising to a height of over a thousand feet close to the road. Three small bridges, with 10-foot spans were constructed in the Township of Paipoonge, and one bridge, 32-foot span across the Slate River, all in the Township of Paipoonge.

After gravelling was finished, and while it was being done, the road was frequently dragged and kept in first class condition during the season. On this road there is now a great deal of automobile traffic from the northern part of the United States. Duluth, Superior City, Minneapolis and St. Paul and other cities. This road will soon become one of the most popular tourist roads in



A winter harvest, Northern Ontario.

Western Ontario, as well as in the northern part of the United States. The scenery along the road is very fine.

Oliver Road:

This road was re-graded, and surfaced with shale rock and gravel from Kakebeka to Murillo, about 9 miles. Six thousand five hundred yards of shale rock and gravel was used on this road.

Arthur Street Road:

This road was re-graded and gravelled from Kakabeka Falls easterly for 5 miles. Four thousand and two hundred and fifty-eight yards of gravel were used on this road.

Township of O'Connor:

Re-graded road between Concessions 6 and 7 across lots 1 to 6, 3 miles; also re-graded road between lots 6 and 7, across Concessions 6, 5, 4, 3, 4 miles, and the north half of 2, $\frac{1}{2}$ mile. Put 3 culverts and 5 bridges on this road, one across Cedar Creek 22-ft. span, one across Tin Pail Creek, 16-ft. span, one across Cotton Wood Creek, 18-ft. span, 2 (across unnamed creeks) 16 and 18-ft. span, respectively.

Pearson Township:

Road between 3 and 4 Concessions, across lots 7, 8, 9 and 10 was re-graded. Two small bridges were constructed. On this road $\frac{1}{2}$ mile of new road was graded and one mile old road re-graded.

Township of Conmee:

Between lots 4 and 5 across N. $\frac{1}{2}$ of Concessions 1, 2, 3, 4, and the S. $\frac{1}{2}$ of Concession 5 to Brule Creek, a distance of 4 miles. On this road hills were cut down, road widened, ditched and graded. Several small culverts were put in and about one mile road was gravelled, $\frac{1}{4}$ mile crosslaid, and bridge across Brule Creek repaired.

Silver Mountain Road:

This road from the Silver Mountain to Hymers was brushed out to a width of 50 ft., graded and ditched in places for a distance of $11\frac{1}{2}$ miles. This road now connects up Stanley Village, Fort William and Port Arthur and surrounding country to the Village of Hymers.

Dawson Road:

Commencing on the west boundary of McIntyre Township, operations were carried on northwesterly to Kaministiquia, C.P.R. Stations, $9\frac{1}{2}$ miles. This road was re-graded and graded and culverts placed where required. A bridge 62 ft. long was reconstructed across a small creek flowing out of Mud Lake along the road. Several hills were cut down and gravel placed on the road where required. The road was gravelled in places for a distance of about 3 miles. Three small bridges with 12 ft., 10 ft. and 15 ft. spans were constructed and 76 wooden culverts placed.

\$82,724.52 was expended in this district.

ROADS IN THE DISTRICT OF KENORA.

The work in this district was commenced early in June at Dryden on the Canadian Pacific Railway on lot 5, Concession 5, Township of Van Horne. From this point the work extended westerly to a point west of Oxdrift Station and east of Dryden commencing at Elm Bay, about 10 miles and extended from that point easterly to the Village of Wabigoon. This work was a continuation of the work of the trunk road system started in this section in 1917. While the season was very favourable for road work, owing to weather conditions, the difficulty of getting labour was very great and for that reason we were not able to carry out all the work laid out for the season. Near Dryden a diversion was made from the

old road passing through the Dryden Pulp & Paper Company's property. The diversion made improved the grade and shortened the distance. At this point there was an offtake drain dug into the Wabigoon River, 300 ft. From Dryden west to Oxdrift Station, about 7 miles, the old road was widened and straightened. The worst grades were cut down and depressions filled. The road was well ditched and graded. Corrugated iron culverts were placed where required and 2 small wooden bridges constructed on lots 6 and 8 in the 5th Concession, Van Horne. The road was surfaced with gravel for a distance of 5 miles. Forty-two corrugated iron culverts, ranging from 10 in. to 36 in. in diameter were placed where required and 3 stone culverts constructed. Swamps or muskegs were all well ditched and covered with corduroy where required and an offset ditch dug on lot 11, Concession 6 on said township $\frac{1}{2}$ mile in length. The work extended about 4



A view of the prehistoric mounds on the banks of the Rainy River.

miles west of Oxdrift Station on the Canadian Pacific Railway. This portion of the road, however, has not been gravelled, but merely brushed out, ditched and graded. Owing to the long haul in getting gravel, it was deemed advisable to do this work in the winter season, as it could then be done at a much less cost.

The trunk road east of Dryden was constructed last year to a point on Elm Bay of Wabigoon Lake. From that point to the Village of Wabigoon, the old road was abandoned owing to the character of the country it passed through, it being a mere lumber road. A new road was located through a level country, the distance being about $6\frac{1}{2}$ miles. This road was cut out and the brush piled, but no grading done.

In the Township of Mutrie, west of Eagle River, 16 miles west of the Town of Dryden, a small piece of work was done in front of lots 8, 9 and 10, Concession 1, about $1\frac{1}{2}$ miles of this road was partly reconstructed.

The trunk road connecting the Towns of Kenora and Keewatin constructed 6 years ago was repaired and re-surfaced in places where it had become rutted and the dangerous crossing on the Canadian Pacific Railway almost in front of the Keewatin Station was improved and widened from 12 ft. to 32 ft. The grade on approaching to the railway was cut down, and a retaining wall of 150 ft. in length made of stone was erected, making this dangerous crossing safe.

\$14,234.31 was expended on the work in this district.



A vegetable garden on the banks of Rainy River, showing one of the prehistoric mounds to the right.

ROADS CONSTRUCTED AND REPAIRED IN THE DISTRICT OF RAINY RIVER.

Number of miles of new and old roads worked on	71
“ “ new roads graded	15
“ “ old roads graded	22¾
“ “ road ditches dug	19
“ “ road cut out	14½
“ “ roads grubbed	11
“ “ roads gravelled	27¾
“ “ tap drains dug	2¼
“ “ road dragged	94
“ “ culverts built	27
“ “ bridges built, 20-ft. span	1

TOWNSHIP OF SPOHN.

On road south of con. 3, in front of lots 5 and 6, 1 mile of new road was graded, of which ¼ mile was grubbed and ¾ mile gravelled.

On road between lots 4 and 5, across cons. 3 and 4, 1 mile was double ditched, ¾ of a mile single ditched, and 1¾ miles graded.

WILD LANDS RESERVE.

On road between secs. 29 and 30, 22 and 21, 13 and 14, and between 5 and 6, 4 miles of new road was graded, $4\frac{1}{2}$ miles of ditches deepened, 1 mile of tap drain dug, 4,500 feet being between secs. 5 and 13 and the remainder north of sec. 5; 6 culverts were built on the above roads.

The above road in the Wild Lands Reserve and the Township of Spohn completes the grading of the highway from the Town of Rainy River to the Lake of the Woods and is the only highway in the Rainy River district connecting the highway system with the Lake of the Woods.



A field of grain in the Rainy River Valley near Stratton. Yield 100 bushels to the acre.

Township of Atwood:

On road east of Section 36, 1,400 ft. of road was double ditched and 4,000 ft. single ditched—(1 mile 120 ft.) One mile 120 ft. of the above road was graded. On road across river lots 1 to 23 and east of river lot 24, 2 miles of road was re-gravelled.

Township of Blue:

West of Sections 6, 7 and 18 and north of Section 7, 4 miles of road was single ditched and the grubbing widened out four feet. The above road was graded through its entire length for a distance of 4 miles. North of Section 8 the road was cleared, burnt and grubbed for a distance of $\frac{1}{2}$ mile and 338 ft. and 2 culverts built.

Township of Worthington:

On the road south of Sections 32, 34, 35 and 36, one mile and 1,432 ft. re-gravelled. The road ditches were deepened for a distance of 2,186 ft. and 2 new culverts built.

Township of Pratt:

On road between lots 4 and 5 across Concessions 5 and 6 and across lots 3 and 4 north of Concessions 6, three miles of road was re-graded and brush cut and burnt on side of road for $2\frac{1}{2}$ miles.

Township of McCrosson:

The road between lots 2 and 3 across Concessions 1 and 2 was re-graded for 2 miles and brush on the sides of the road cut for $2\frac{1}{2}$ miles and partly burnt; $\frac{1}{2}$ mile of this road was double ditched, and 3 new culverts built.

Township of Dilke:

The trunk road west of river lot 48 and across river lots 1 to 48 was re-gravelled for approximately $3\frac{1}{2}$ miles, and one new culvert built.

Township of Morley:

On road west of Sections 18 and 19, one mile of road was re-gravelled. North of Section 19 one mile of road was gravelled and re-graded. North of Sections 11 and 12 about $\frac{1}{2}$ mile of the trunk road was gravelled.

Long Sault Reserve:

On the trunk road south of the Canadian Northern Railway 3 miles of road was gravelled. The road on the west boundary of Section 3 was cleared and burnt for $\frac{1}{2}$ mile, and grubbed and graded. On the road between river lots 30 and 31 and on the continuation of said road north of the Canadian Northern Railway 1 mile was cleared and burnt, and $1\frac{1}{4}$ miles grubbed, about 1 mile graded and $\frac{1}{4}$ mile of corduroy placed. On the road between Sections 11 and 12 and between river lots 44 and 45, $1\frac{2}{3}$ miles were cleared and partly grubbed and burnt.

Township of Shenston:

On road east of Section 19, $\frac{1}{4}$ mile of road was cleared, burnt, grubbed and graded. On the road north of Sections 34, 35 and 36, $2\frac{3}{4}$ miles were cleared and partly burnt.

Township of Nelles:

Road between Sections 8 and 9, and between Sections 4 and 5 was graded for 1 mile, and $\frac{1}{4}$ mile gravelled and ditched, and 330 ft. of corduroy laid. On road between Sections 5 and 8, and 6 and 7, $\frac{3}{4}$ of a mile was graded and $\frac{1}{2}$ mile gravelled.

Township of Barwick:

Across the Township of Barwick the trunk road was re-graded for 3 miles. The trunk road across river lots 34 to 44 was gravelled for 1 mile.

Manitou Indian Reserve:

The trunk road on the Manitou Reserve was gravelled for $\frac{1}{4}$ mile, and 3 miles was re-graded.

Townline of Mather and Kingsford:

On the road across Concessions 4, 5 and 6 and on correction line on the north boundary of Kingsford, 3 miles of road was burnt and grubbed, 2¼ miles of side ditches were built, 2 miles of road put up with slushers and horse grader, 1 mile of corduroy laid, 1 mile of tap drain dug and 6 culverts built, and 1 bridge built with a span of 20 ft.

Township of Potts:

On the north end of road between lots 2 and 3 across Concessions 1, 2, 3, 4 and 25 chains on the south of Concession 5, 1 mile and 1,560 feet were cleared and partly burnt. Half mile of this road was single ditched, ½ mile of corduroy laid, and 3 miles grubbed and 1½ miles graded, and 4 culverts built.



A view on the banks of the Rainy River.

Township of Lash:

On road north of Sections 25 and 26, ½ mile of road was re-graded over rock. On road north of Sections 25, 26, 27 and 28, 3 miles of road was gravelled.

Township of Carpenter:

On road east of lot 1, across Concessions 3, 4, 5 and 6, 3½ miles of road was re-graded.

Township of Devlin:

On the road north of Sections 30 and 29 and east of Section 29, and north of Sections 21, 22, 23 and 24, 4½ miles of the trunk road was re-gravelled. On road north of Section 20, ½ mile was gravelled. The road east of Section 3 was re-graded for ½ mile.

Township of Woodyatt:

The river road across lots 28 to 47 was re-graded for $2\frac{1}{2}$ miles. The above road was gravelled excepting across lots 31 and 32 for $2\frac{1}{4}$ miles. The road east of river lot 17 and Section 34 was re-graded and gravelled 2 miles.

Township of Kingsford:

Road between lots 4 and 5 across Concession 2 was grubbed, ditched and graded 1 mile.

Township of Miscampbell:

The road across lot 4 south of Concession 1, and between lots 4 and 5 across Concession 1 was cleared, grubbed and single ditched for $1\frac{1}{4}$ miles. Twelve hundred feet of tap drain was dug and 3 culverts built.

\$69,480.59 was expended on the work in this district.

To the Honourable G. H. Ferguson, Minister of Lands, Forests and Mines, Ontario.

SIR,—I have the honour to present to you the report of the road and bridge construction and improvement carried out in the District of Temiskaming and that portion of the District of Algoma, in the vicinity of Hearst, which is at present the northern terminus of the Algoma Central & Hudson Bay Railway, during the year ending October 31st, 1918, under the provisions of the Act of 1912 and its subsequent amendments for the Development of Northern and North-western Ontario.

For the purpose of carrying on the work the area described above is divided into sub-districts designated by the centre from which the work is locally directed as follows; the Englehart, Matheson, Cochrane and Hearst districts. In addition there was work done upon the roads independently of these local headquarters and these are reported upon separately.

Whether or not, it is the fear that the Government will curtail the expenditure of money on roads and bridges in organized townships and that consequently taxes will be levied locally for such and similar expenditures, or, for some other reason or reasons few steps are being taken to form municipal organizations in Temiskaming. The Township of Teck in the Kirkland Lake Mining District has taken steps to organize, the residents of the Township of Playfair near Matheson are discussing it seriously and the Townships of Savard and Marter near Englehart have organized under the Statute Labour Act to assist in the construction and maintenance of their roads, but outside of these townships I have heard of no move being made in the direction of assuming the burden of their own public works.

The season in Temiskaming was rather unfavourable for the carrying on of road work, particularly in the latter portion of it. It rained rather frequently during the fall, retarding road construction.

Attached is a statement giving in detail the work accomplished, the expenditures being shown in the statement of the Secretary.

I have the honour to be, Sir,

Your obedient servant,

C. H. FULLERTON,

Acting Director Northern Development Branch, Temiskaming District.

Toronto, Ont., October 31st, 1918.

COCHRANE DISTRICT.

Township of Brower:

Road between Concessions 4 and 5 across Lots 1 and 2, one mile cut, burned and grubbed.

Road between Concessions 2 and 3 across Lots 9 to 12, two miles grubbed and sideditched.

Road between Lots 6 and 7 across Concessions 4 and 5, $\frac{3}{4}$ mile sideditched.

Road between Lots 10 and 11 across Concession 5, $\frac{3}{4}$ mile sideditched.

Road along Canadian Government Railway across Lot 7: $\frac{1}{3}$ mile sideditched.

Road between Lots 8 and 9 Concession 5, $1\frac{1}{2}$ miles sideditched.



The Fort Frances and Rainy River trunk road through the town of Rainy River.

Township of Calvert:

Roads between Lots 4 and 5 across Concessions 2 and 3, between Concessions 2 and 3, across Lot 5 and between Lots 5 and 6, across Concession 1, one mile sideditched.

Road between Concessions 4 and 5 across Lots 1 and 2, $\frac{1}{2}$ mile graded and 400 ft. sideditched.

Road between Concessions 1 and 2 across Lot 9, $\frac{1}{2}$ mile cut and burned.

Road between Concessions 4 and 5, one mile cut, burned and grubbed across Lots 4 and 5.

Roads between Lots 4 and 5, across Concessions 2 and 3 and between Concessions 1 and 2 across Lot 5, $\frac{1}{2}$ mile grubbed and $1\frac{1}{2}$ miles sideditching.

Road between Concessions 4 and 5, across Lot 3, 1,000 yds. cut, burned and grubbed.

Trunk Road, Iroquois Falls to Porquis Jct. 1 culvert built, 1 mile graded, 51 chains ditched, 47 chains repaired and 53 chains gravelled.

Road between townships of Calvert and Clergue across Concession 1, 3 culverts repaired, 13 chains gravelled and 122 chains ditched.

Township of Clergue:

Road between Concessions 4 and 5 across Lots 3, 4 and 5, $1\frac{1}{2}$ miles cut and burned.

Township of Clute:

Road between Concessions 4 and 5, across Lots 26, 27 and 28; 20 chains grubbed and 3 chains ditched.



Large game in the District of Rainy River.

Roads between Concessions 8 and 9, across Lots 14, 15 and 16, and between Lots 12 and 13 across Concession 7, 27 chains ditched.

Road between Concessions 10 and 11, across Lots 1 and 2, 1 bridge and 1 culvert built and 5 chains graded.

Road between Lots 12 and 13, across Concessions 2 to 7, 2 culverts built, 48 chains ditched, 84 chains graded and 7 chains repaired.

Township of Glackmeyer:

Road between Concessions 6 and 7, across Lot 12, 18 chains repaired.

Road between Lots 24 and 25, across Concession 2, 47 chains gravelled, and 11 chains repaired.

Road between township of Glackmeyer and township of Clute, across Concessions 7 to 12 inclusive, 3 bridges and 7 culverts built, 18 chains ditched, 27 chains repaired and $2\frac{1}{2}$ miles graded.

Roads between Concessions 4 and 5, Lots 19 to 23 inclusive, and between Lots 18 and 19, Concessions 2 to 12 inclusive, 7 culverts built and 3 repaired, 16 chains grubbed, $22\frac{1}{2}$ chains ditched, 145 chains graded and 360 chains repaired.

Township of Lamarche:

Road between Concessions 5 and 6, across Lot 4, 10½ chains ditched.

Road between Lamarche and Glackmeyer townships across Lots 5 to 9 inclusive, 22 chains cut and burned and 61 chains gravelled.

Road between Lots 8 and 9, Concession 6, 60 chains repaired and 61 chains gravelled.

Road between Lots 6 and 7, Concession 5, 32 chains gravelled.

Road between Lots 5 and 6, across Concessions 7 and 8, 69 chains repaired and 60 chains gravelled.

Road between Lots 2 and 3, across Concession 6, 5 culverts built and one repaired, 1 mile ditching and 3 chains of repair to road.



A field of corn in the District of Rainy River, Township of Curran.

Township of Leitch:

Road between Concessions 4 and 5, across Lot 2; 25 chains grubbed.

Road between township of Leitch and Blount, across Concession 6, 1 culvert built and ½ mile grubbed and ditched.

Township of Newmarket:

Trunk Road on line between Calvert and McCart, across Concession 6 and along T. & N. O. Railway from mileage 231.5 to mileage 236 in the township of Newmarket, 4½ miles cut and burned, 5 miles grubbed, 3 miles ditched and a small amount of repairs.

Township of Shackleton:

Road across Lot 21, Concession 12, 23 chains cut, burned and grubbed.

Road across Lot 23, Concession 12, 20 chains grubbed.

ENGLEHART DISTRICT.

Township of Armstrong:

The road on Lot 6 Concession 4 drained and gravelled and a culvert was built on it.

The boundary road between Armstrong and Beauchamp was improved by replacing 2 trestle bridges with culverts and fills in Concessions 4 and 5. In Concession 6, $\frac{1}{2}$ mile of new road was cut out and made ready to grade the remaining $\frac{1}{2}$ mile being grubbed 15 ft. in width.

Townships of Beauchamp and Henwood:

The boundary road between these townships was improved by replacing 2 bridges with culverts and fills.

Township of Catharine:

The road between Concessions 1 and 2, across Lot 12, was stumped and several culverts built.

Township of Chamberlain:

The roads between Concessions 4 and 5, across Lot 11 and between Lots 10 and 11, across Concession 5, were re-cleared and drained, 7 culverts built and are now ready for grading.

The road between Concessions 5 and 6 from centre of Lot 8 to west side of Lot 10, was cleared and grubbed ready for grading.

The road between Concessions 3 and 4, across Lots 7 and 8 was cut and logged.

The road between Concessions 1 and 2 was improved as follows: stumped and grubbed across Lot 8 and cut out, stumped and grubbed across Lots 9 and 10, 14 culverts were built and the road ready to be graded.

Township of Dack:

A new road was made in Concession 6, across Lots 1 and 2, along the T. N. O. Railway and thence West to the West side of Lot 2, the road was drained and made ready to grade, 12 excellent cedar culverts were built upon it.

The road from Englehart to Charlton across Lots 1, 2, 3, and 4, Township of Dack and across Lot 12 Township of Evanturel, between Concessions 5 and 6, was dragged and repaired.

Temporary repairs were made upon the roads between Lots 2 and 3, Concession 6.

The road between Dack and Chamberlain townships was repaired for 2 miles across Lots 9, 10, 11 and 12.

The road between Lots 8 and 9, across Concession 6 was repaired and a culvert built on it.

Opposite Lot 9 between Concessions 5 and 6, a culvert was built and the approaches improved.

The road between Concessions 4 and 5 was graded across Lots 1, 2, 3, and 4 and drained across Lot 4.

The road between Lots 2 and 3 was stumped ready for grading and 4 culverts were built.

Three hills on the road across Lots 12 in Daek and 1 and 2 Robillard between Concessions 3 and 4 were reduced.

Township of Evanturel:

The road between Concessions 1 and 2 was drained and graded across Lots 1 and 2. The road between Concessions 5 and 6 was repaired across Lots 7 and 10 inclusive.

The road between Concessions 3 and 4; to prevent the flooding of Lot 6, Concession 4 by road drains, a ditch across this Lot was undertaken to carry the water to a suitable outlet.



Potato field in the Rainy River Valley.

The road between Evanturel and Ingram across Concessions 2 and 3 was repaired, the drainage was improved and 3 culverts built.

Township of Lorrain:

The roads between Lots 12 and 13 across Concessions 3 and 4, for a distance of $1\frac{1}{2}$ miles, was stumped, grubbed, drained and graded and 7 culverts built.

Across Lot 12 Concession 5 the road was drained, a culvert built and 50 yds. of gravelling done.

Township of Marter:

Road between Lots 10 and 11, Concession 1, approaches to bridge over Crocodile Creek were improved.

Road between Lots 6 and 7, Concession 1, repaired a distance of 400 yds.

Road between Lot 5, Concession 4 cut out 40 ft. wide, stumped 12 ft. wide and 1 culvert built.

Road between Concessions 3 and 4 was drained by conveying water to a suitable outlet, instead of flooding private land.

On road between Lots 2 and 3 across Concession 1, Marter, and Concession 6 Evanturel, $\frac{3}{4}$ of a mile was stumped and graded, 100 yds. of corduroy laid and a hill reduced.



Typical view of one of the back townships in the District of Rainy River.

Township of Marquis:

Road between Lots 8 and 9 across Concession 1, stumped, grubbed and drained, 8 culverts and 1 bridge, 20 ft. span, built and 100 yds. of corduroy laid.

Township of Otto:

Road across Lots 3 and 4, between Concessions 5 and 6 stumped, sidebrushed and drained, 4 culverts were built.

Township of Pacaud:

A road was built from the new railway station at Boston Creek to connect with the road which leads to the working properties.

Road across Lot 6, Concession 6 was cut 40 ft. wide and stumped 20 ft. wide, 2 culverts were made and the road graded.

Road between Concessions 4 and 5, a bridge of 30 ft. span was built and the approaches graded.

On road between Lots 4 and 5, a bridge of 40 ft. span was reconstructed and the approaches improved in Concession 1, and the ditches re-opened and the road graded across Concession 2.

Township of Robillard:

Road between Lots 8 and 9 across Concession 5, $\frac{1}{2}$ mile logged, and stumped 30 ft. wide.



View on the Rainy River and Spohn trunk road.

Township of Savard:

Road between Lots 2 and 3 across Concession 1, $\frac{1}{2}$ mile cleared and stumped 30 ft. wide.

Townships of Robillard, Truax, Tudhope and James:

The road from Charlton to Englehart runs through these townships and it had fallen so badly into disrepair that travel over it was exceedingly difficult and unsafe. General repairs were made upon it for a distance of 16 miles. Rock and boulders were removed, the drainage vastly improved, 26 culverts were made, $11\frac{1}{2}$ miles were gravelled and $\frac{1}{2}$ mile of corduroy laid and covered.

HEARST DISTRICT.

Township of Casgrain:

Road on line between Lots 24 and 25 across Concessions 1, 2, and 3, general repairs.

Road on line between Concessions 2 and 3, across Lots 25 and 26, general repairs.

Road on line between Concessions 4 and 5, across Lots 20, 21 and 22.

Road on line between Lots 18 and 19, on part of Concessions 1, 4, 5 and 6, grading and building culverts.

Road on line between Concessions 2 and 3, across Lot 24 and part of 23, ditching.

Road on line between Concessions 4 and 5, across part of Lots 18 and 19, ditching.

Road on line between Lots 18 and 19, across Concessions 4 and 5 and part of 6, ditching.

Township of Hanlan:

Road across Lots 23 to 28 inclusive, Concession 2, grubbing and burning.

Road on line between Lots 18 and 19, across Concession 2 and part of Concession 1, grubbing and burning.

Road across part of Lot 20, Concessions 1 and 2, and Lots 21 to 23, Concession 2, ditching.

Road on line between Lots 18 and 19, across Concession 2 and part of Concession 1, ditching.

Township of Kendall:

Road between Lots 24 and 25, across Concessions 11 and 12, general repairs.

Road across part of Lots 21 and 22 and all of Lots 23 and 24, Concession 10, on East bank of Mattawishkwia River, grubbing and burning.

Road on line between Lots 24 and 25, across Concession 9 and part of 10, grubbing and burning.

Road between Concessions 9 and 10, grading and building culverts.

Road on East bank of Mattawishkwia River; temporary bridges on line between Lots 24 and 25.

Road on Lots 25 and 26 and part of 27 and 28, between Concessions 9 and 10, ditching.

Road on line between Lots 24 and 25, across part of Concessions 9 and 10, ditching.

Road on part of Lots 23 and 24, on East bank of Mattawishkwia River, ditching.

Road between Townships of Kendall and Way, across Lots 1 and 5 inclusive, grubbing and ditching.

Road across Concessions 8 to 12 inclusive, general repairs.

Road across Concession 7, grubbing, burning and ditching.

Trunk Road, regrading, ditching, repairing culverts, across townships of Kendall, part of Way and Lots 12 to 16 Hanlan.

Township of Owens:

Road from sand pit new mileage $80\frac{1}{2}$ Canadian Government Railway, to North Boundary of Owens township, $65\frac{1}{2}$ chains cut, $14\frac{1}{2}$ chains graded, $8\frac{1}{2}$ chains crosslaying.



Draining the Swamp Lands in the District of Rainy River, through the Wild Land Reserve.

Road between Lots 24 and 25 from boundary between townships of Owens and Williamson, $2\frac{1}{4}$ miles cut, 2 miles graded, with crosslaying where necessary.

Road between Concessions 16 and 17, 21 chains cut, burned, and grubbed, $2\frac{1}{2}$ chains graded, $7\frac{1}{4}$ chains crosslaying.

Road between Concessions 14 and 15, 44 chains slashed, 27 chains stumped and grubbed.

Road between townships of Owens and Williamson, across Lots 25 and 26, $\frac{1}{2}$ mile cut, 26 chains road completed, 10 chains crosslaying, 5 chains grading.

A Railway spur was run off the Canadian Government Railway at about mileage 801 $\frac{1}{2}$, for the purpose of settlement in Owens township.

Township of O'Brien.

Road between Lots 12 and 13, cutting, grubbing and burning, 1 mile to line between Concessions 8 and 9.

Road between Concessions 8 and 9, cutting, grubbing and burning across Lots 1 to 25 inclusive and cutting and burning across Lot 26.



Bridge at "Notch," near mouth of Montreal River, Temiskaming.

Road between Concessions 12 and 13, from line between Lots 16 and 17 to line between Lots 10 and 11, cutting, grubbing and burning ditching and crosslaying; and cutting, grubbing and ditching across Lots 15 to 18 inclusive.

Road between Concessions 10 and 11, from line between Lots 24 and 25 to line between Lots 12 and 13, cutting, grubbing, burning, ditching and crosslaying.

Road between Concessions 14 and 15, across Lots 19, 20 and 22, draining roadway and building culverts.

Road between Lots 18 and 19, cutting, grubbing, ditching and crosslaying, across Concessions 10, 11 and part of 12.

Road between Lots 6 and 7, across Concession 9, cutting and grubbing, and across Concessions 5, 6, 7 and 8, cutting and burning.

Road between Lots 22 and 23, cutting, grubbing, burning, ditching and crosslaying across Concessions 11 and 12.

Road between Concessions 10 and 11, cutting, grubbing and burning across Lots 1 to 8 inclusive.

Roads between Lots 24 and 25, across Concessions 7 to 10 inclusive, and between Concessions 6 and 7, across Lots 25, 26, 27 and 28 to Woman River, cutting, grubbing and burning.

Road between Lots 12 and 13, cutting, grubbing and burning across Concessions 5 to 15 inclusive.

Road between Concessions 6 and 7, cutting, burning, and grubbing across Lots 1 to 12 inclusive.

Road between Lots 6 and 7, cutting, grubbing and burning across Concessions 10 to 14 inclusive.

Road between Concessions 12 and 13 across Lots 1 to 6, cutting, grubbing and burning.

Road between Concessions 14 and 15, across Lots 12 to 20 inclusive, cutting, burning and grading.

Trunk road along North side of railway, across 8 to 26, repaired, drained, corduroy laid and culverts built.

Boundary road between townships of O'Brien and Fauquier, cut, grubbed and burnt across Concessions 5 to 12 inclusive.

In addition to the above, the following were built, a bridge on Lot 19, on the line between Concessions 12 and 13, 10 temporary bridges and 28 culverts.

The work of bridging the Kapuskasing River has been undertaken, contracts were let for the delivery of two steel spans, one 80 ft. and the other 120 ft. in length, and four masonry abutments have been constructed to support the steel spans.

MATHESON DISTRICT.

Township of Beatty:

Road between Lots 9 and 10, Concession 1, 1 mile cut, stumped and gravelled.

Road between Lots 10 and 12, $\frac{3}{4}$ mile cut and logged in Concession 1, 2 miles cut, stumped and grubbed in Concessions 4 and 5.

Road between Concessions 2 and 3, 40 chains stumped and grubbed across Lot 5 and part of 6, $1\frac{1}{2}$ miles regraded across Lots 11, 12 and 13.

Township of Benoit:

Road between Concessions 2 and 3, $\frac{1}{2}$ mile stumped and grubbed across Lots 4, 5 and part of 6.

Road between Lots 8 and 9 across Concessions 2 and 3, 6 culverts and 1 bridge, 30 ft. long, built, and 2 miles stumped and grubbed.

Road between Concessions 1 and 2, 3 miles stumped and grubbed across Lots 3 to 8 inclusive, 20 chains stumped, 5 chains graded and 500 cu. yds. of fill on approaches to bridge on Lot 9.

Township of Bond:

Road between Concessions 2 and 3, across Lot 2, 30 chains stumped and grubbed and 10 chains graded.

Road between Lots 2 and 3, across Concession 5, 20 chains stumped and grubbed and 44 chains graded.

Road across Lot 2 Concession 6, 10 chains cut stumped and ditched.

Township of Bowman:

Road between Lots 4 and 5, 6 chains ditched, 5 chains gravelled.

Road across Concession 4, Russel Creek bridge 30 ft. span repaired, Concession 5.

Road between Concessions 5 and 6, across Lot 7, 10 chains of muskeg regraded and covered with clay.

Road between Lots 2 and 3, across Concessions 4, 5, and 6, $2\frac{3}{4}$ miles graded, 7 culverts built and grades improved on 3 hills.

Road between Concessions 4 and 5, across Lots 11 and 12, 1 mile stumped and grubbed.

Road between townships of Bowman and Hislop, 1 bridge built, 30 ft. span.



Field of grain in Temiskaming.

Township of Carr:

Road between Lots 8 and 9, across Concessions 1 and 2, $11\frac{1}{4}$ miles graded.

Road on Lot 2, Concession 1, 1 bridge built, 20 ft. span.

Road on Lot 10, Concession 1, 1 culvert built and 20 chains regraded.

Road between Concessions 3 and 4, on Lots 1, 2 and 3, 2 bridges, 20 ft. span and 6 culverts built and 500 cu. yds. clay fill.

Road between Lots 2 and 3, 1 mile gravelled and 500 cu. yds. clay fill on Concession 3, 2 miles regraded, 2 miles dragged across Concessions 3 and 4.

Road between Concessions 1 and 2, across Lot 5, $1\frac{1}{2}$ mile graded and 3 culverts built.

Road between Lots 4 and 5, 2 miles regraded, $\frac{3}{4}$ mile stumped and grubbed across Concession 5.

Road between Townships of Carr and Beatty, 2 miles regraded.

Road between Townships of Carr and Bowman, 10 chains gravelled.

Road between Concessions 2 and 3, across Lots 1 and 2, 1 mile dragged.

Road between Concessions 5 and 6, across Lots 5, 6, 8, 9 and part of 7, $2\frac{1}{4}$ miles stumped and grubbed.

Road between Concessions 4 and 5, 1 mile cut, stumped and grubbed across Lots 5 and 7, $\frac{1}{2}$ mile cut, logged and burned across Lot 6.

Trunk Road on Concession 1, across Lots 7, 8 and 9, $1\frac{1}{4}$ miles gravelled.

Road between North and South halves Lot 12, Concession 4, $\frac{1}{2}$ mile cut, stumped and grubbed.

Road between Lots 4 and 5, 30 chains stumped and grubbed and 29 chains graded across Concession 4.

Road between Concessions 4 and 5, across Lots 1 and 2, 58 chains graded and 2 culverts built.

Road between Townships Currie and Bond, 40 chains stumped and grubbed across Concession 4, and part of 2 miles burned across Concessions 5 and 6.

Township of Hislop:

Road between Concessions 5 and 6, across Lots 4, 5, 6 and 7, 2 miles regraded.

Road between Lots 9 and 10, 1 mile stumped, grubbed and graded, and 2 culverts built.

Road between Concessions 4 and 5, $\frac{1}{2}$ mile cut, stumped and grubbed and 4 culverts built on Lot 8. One mile graded across Lots 8 and 9.

Road between Lots 7 and 8, across Concession 4, 30 chains cut, stumped and grubbed.

Road between Lots 9 and 10, across Concessions 2 and 3, $1\frac{1}{8}$ miles cut and burned.

Road between Concessions 2 and 3, $\frac{3}{4}$ mile stumped, grubbed and burned across Lots 12 and 13, $\frac{1}{2}$ mile graded across Lot 13.

Township of Playfair:

Road between Lots 2 and 3, across Concession 5, 1 mile cut, logged and burned, $\frac{3}{4}$ mile stumped and grubbed.

Road across Lot 8, Concession 6, $\frac{1}{2}$ mile cut, stumped and grubbed.

Road between Lots 8 and 9, across Concession 6, 1 mile cut, stumped and grubbed.

Road between Concessions 5 and 6 on Lot 4, 80 cu. yds. filling at approach to bridge.

Township of Stock.

Road between Concessions 1 and 2, $1\frac{1}{2}$ miles cut and burned, across Lots 1, 2 and 3, 1 mile graded and 7 culverts built across Lots 1 and 2.

Township of Taylor:

Road between Concessions 2 and 3, road, culverts and bridges repaired, across Lots 1 to 6 inclusive, $\frac{1}{2}$ mile graded across Lot 7, $\frac{1}{2}$ mile stumped and grubbed across Lot 8.

Road between Lot 8 and 9, across Concession 2, 1 mile stumped and grubbed.

Road between Lots 10 and 11, across Concessions 3 and 4, 2 miles cut and logged.

Road between Townships of Taylor and Carr, $\frac{1}{2}$ mile regraded across Concession 2.

Township of Walker:

Road between Concessions 5 and 6, across Lots 10, 11 and 12, $1\frac{1}{2}$ miles cut and burnt.

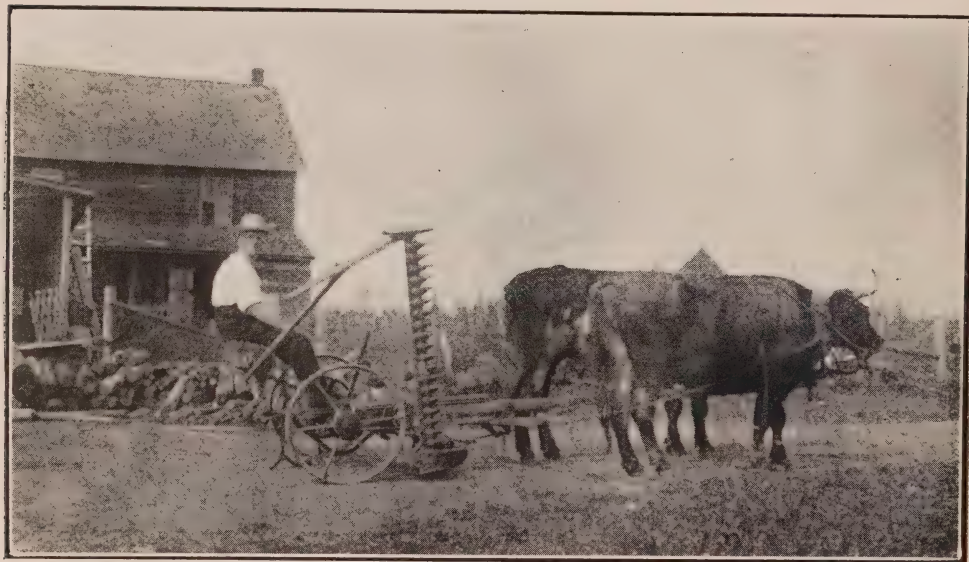
Road between Concessions 3 and 4, across Lot 12, $\frac{1}{2}$ mile cut and burnt.

Road between Concessions 4 and 5, $\frac{1}{2}$ mile stumped and grubbed across Lot 12, 10 chains repaired Lots 10 and 11.

Road between Lots 10 and 11, across Concession 1, 50 chains cut and logged.

Road across Concession 2, 1 mile cut, stumped grubbed and graded.

Road on Lot 12, Concession 2, bridge built across Driftwood River and approaches filled.



A settler's first team in Temiskaming.

Township Boundaries:

Ten chains of crosslaying repaired between Walker and Clergue and roads repaired between the townships of Walker, Clergue, Stock and Bond.

Road to Lightning River, Mineral Belt, 35 miles cut to provide winter road and later repaired to make it passable as summer road, through township of Munro, McCool, Michaud and unsurveyed territory.

Road between townships of Currie and Taylor, old corduroy lifted, muskeg regraded and covered with clay across Lots 1 to 4 and 8 to 11, both inclusive.

Road between townships of Carr and Bowman, old corduroy lifted, muskeg regraded and covered with clay across Lot 12.

PORCUPINE DISTRICT.

Township of Delora:

Road to Ankerite Mine in continuation of road under construction by township of Tisdale, $\frac{1}{2}$ mile graded and $\frac{1}{4}$ mile surfaced with rock.

Road between townships of Delora and Ogden, known as Hayden Road, 1 mile surfaced with gravel.

Township of Mountjoy:

Road South side of Mattagami River, scow at crossing repaired and location altered, 3 miles graded, 7 culverts built, 1,917 yds. ditched, 63 rods corduroy laid. One bridge built 16ft. by 60 ft. and 300 yds. surfaced with gravel.

Road East side of Mattagami River, $\frac{7}{8}$ mile graded, 400 yds. ditched, 2,330 cu. yds. earth fill, 3 culverts built.

Township of Tisdale:

Trunk Road, South Porcupine to Timmins, 4 miles repaired, 2 miles surfaced with rock and gravel.

Road from Golden City to South Porcupine via Pottsville on North side of Porcupine Lake, 1 bridge built 16 ft. by 90ft., approaches and piers filled with rock, 1,000 ft. of corduroy 8 ft. wide surfaced with rock, 200 ft. of corduroy laid, 4 large culverts built, 1 mile graded, 1,400 yds. ditched and $\frac{3}{4}$ mile of road repaired.

Township of Whitney:

Road from Golden City to South Porcupine along T. & N. O. Railway, $11\frac{1}{4}$ miles surfaced with rock and gravel and 3 culverts built.

ELK LAKE-GOWGANDA ROAD.

A satisfactory improvement on this road without a large expenditure is very difficult, the traffic is not extensive but the length of the road, some 28 or 30 miles, results in the drawing of exceedingly heavy loads, which, with narrow tires, cut the road down to a boulder bottom making travel upon it rough, uncomfortable and disagreeable.

First class gravel for road building is very scarce along the route of the road, so that no work approaching a permanent nature is possible without the use of crushed rock.

The work done upon the road was carried out under great difficulty owing to the labour shortage and unsuitable weather conditions. Several miles of the road were graded and surfaced with gravel, special attention given to drainage. Many of the old wooden culverts were replaced with steel culverts. The old bridge at Long Point was replaced by a smaller bridge and an extensive fill. At the 22 mile post, the old culvert with corduroy approaches was renewed and approaches filled in. The bridge at Miller Creek was replaced and proper approaches made.

Other work consisted of re-surfacing the worst places on the road and re-pairing the corduroy.

SWASTIKA-KIRKLAND LAKE ROAD.

General repairs were made along this road, about $\frac{3}{4}$ of a mile was graded and $1\frac{1}{4}$ miles surfaced with crushed rock. Twenty-four wooden culverts were replaced with steel culverts and the Lake Shore hill was reduced by the removal of about 350 cu. yds. of rock.

HAILEYBURY-NEW LISKEARD ROAD.

About 3,000 ft. of this road was graded and 7,000 ft. of water-bound Macadam was laid. Four new steel culverts were placed and on other parts of the road slight repairs were made in the way of grading and cleaning side ditches.

LORRAIN ROAD.

This work was done upon that part of the road lying North of the Green Meehan Mine, 2 culverts were replaced, 645 ft. of grading was done and 700 ft. surfaced with rock.

SUMMARY.

The following is a summary of work done during the season.

Old and new roads under construction or repair.....	273	miles
New roads under construction	110	"
New roads made ready for grading	86	"
Roads graded	71	"
Roads surfaced with rock or gravel	25	"
Bridges built or renewed	28	
Culverts built or renewed	253	

To the Honourable the Minister of Lands, Forests and Mines:—

SIR,—I beg to submit for your consideration and recommend that the following amounts be expended during the season of 1919 on the construction of new roads, the maintenance of lately constructed trunk roads, the re-surfacing with stone or gravel of old roads, the construction of bridges and culverts and the drainage of swamp lands in the Districts of Rainy River, Kenora, Port Arthur and Fort William, Sault Ste. Marie, Algoma, Sudbury, Nipissing, Parry Sound, St. Joseph Island and Muskoka:

District of Rainy River:

In the District of Rainy River there are not less than 125 miles of trunk roads to be maintained and dragged; 25 miles of constructed road requiring surfacing with gravel at different points throughout the District and 25 miles of new road to be constructed to meet the immediate requirements of the settlers; also a small expenditure in the mining section east of Rainy Lake. This work will cost approximately \$75,000

District of Kenora:

Repairing and maintaining old roads in the vicinity of Kenora and Keewatin, the construction of trunk roads between Dymont and Eagle River Stations along the Canadian Pacific Railway and along the Canadian Government Railway in the vicinity of Quibell and Superior Junction.. 45,000

District Surrounding Port Arthur and Fort William:

Maintenance of 150 miles of trunk roads, the construction of 30 miles of new roads east of Port Arthur and the surfacing with gravel of 10 miles of old roads, including also the mining road from Schreiber Station, Canadian Pacific Railway to Big Duck Lake now under construction 80,000

Sault Ste. Marie Trunk Road:

The construction of the 17 mile gap on the Sault Ste. Marie and Sudbury trunk road between Algoma Mills and Cutler and maintenance of the trunk road between Sault Ste. Marie and Algoma Mills 100 miles.. 75,000

Sudbury and Algoma Districts:

Re-grading and gravelling in places the Sudbury and Soo trunk road between Copper Cliff and Cutler 30,000

St. Joseph Island:

Completing the trunk road system on St. Joseph Island 15,000

Districts Surrounding the Sudbury Mining District:

Surfacing new road between Coniston and the Garson Mine, constructing and grading a new road between Capreol Station on Canadian Northern Railway and the Selwood Iron Mine on Canadian Northern Railway, maintenance of 50 miles of trunk roads, east, west and north of Sudbury 50,000

Nipissing Districts:

Construction of bridges, repairs and gravelling and new roads from Warren, Canadian Pacific Railway east to Mattawa on Canadian Pacific Railway 40,000

Districts of Parry Sound and Muskoka:

The extension of the North Bay and Toronto trunk road through the Districts of Parry Sound and Muskoka to a point south of Gravenhurst; also trunk road from Trout Creek Station on Grand Trunk Railway west to Loring; also the gravelling in places and maintenance of the North Bay trunk road from North Bay south to Huntsville and other roads in the vicinity 75,000

District of Nipissing:

The extension of the Mattawa and Pembroke trunk road from Mattawa east 50,000

Unforeseen work, repairing roads, bridges 30,000

Office and engineering expenses, equipment and new plant 30,000

\$595,000

J. F. WHITSON,

Commissioner.

Toronto, Ontario, January 15th, 1919.

To the Honourable G. H. Ferguson, Minister, Lands, Forests and Mines, Ontario:

SIR,—Under the provisions of the Acts of 1912 and subsequent amendment for the Development of Northern and North-western Ontario, I recommend for the construction, maintenance and repairs of roads and bridges the following expenditures, for the season ending October 31st, 1918.

In the territory served by the Temiskaming and Northern Ontario Railway from Latchford to Cochrane.

(1) From Latchford to Swastika including the Elk Lake and Charlton branches of the railway and the mining camps of Boston Creek, Kirkland Lake and Larder Lake	\$75,000
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(2) From Swastika to Monteith, this includes the area about Matheson, which is opening up so readily	50,000
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(3) From Monteith to Cochrane, including the Iroquois Falls branch and Porcupine branch of the railway as far as the Porcupine River	50,000
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(4) The Porcupine Mining District, including Mountjoy Township and the bridge over the Mattagami River	50,000
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In the territory served by the Canadian National Railways, from the Quebec boundary to Grant, and southerly along the Algoma Central Railway to Oba.

(1) From the Quebec boundary west to Fauquier including roads for Soldiers' and Sailors' Colony in Shackleton Township	50,000
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(2) From Fauquier to Grant including roads for Soldiers' and Sailors' settlement in O'Brien and Owens Townships	50,000
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Unforeseen expenditures	32,500
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\$357,500

All of which is respectfully submitted.

I have the honour to be, Sir

Your obedient servant,

C. H. FULLERTON,

*Acting Director, Northern Development
Branch, Temiskaming District.*

REPORT OF ONTARIO GOVERNMENT CREAMERY, NEW LISKEARD,
ONTARIO.

To the Honourable, the Minister of Lands, Forests and Mines, Ontario:

SIR,—I beg to submit report of the Creamery from November 1st, 1917, to October 31st, 1918. As we expected a great many of the farmers took advantage of the ready market for their cream, and the steady cash revenue derived from the Creamery.

The past year we had two hundred and twenty-two take advantage of this, and upwards of nine hundred cows were furnishing cream to the Creamery, ranging in herds from two to ten cows. 272,834 lbs. cream were received which produced 67,937.3 lbs. fat, and 84,541 lbs. butter. \$33,015.09 was distributed among the farmers at the lower part of the Clay Belt. The average price paid for fat was 48.5 cents per pound, value of butter, \$38,768.71, average 46 cents per pound, a price that was never before realized in this part of the Province, taking into consideration the amount of butter made at the Creamery.

If this amount had been made into dairy butter farmers would not have realized more than twenty to twenty-five cents per pound, and no cash for their product.

The Matheson District expect to send cream from 150 cows this coming year, as the good railway facilities for shipping cream from points north of here, is a good advantage to the farmers. Milch cows have come in, in great numbers, and while not the kind we would like to see in every case, some very fine pure bred cows have been brought in.

I am starting a cow testing association in the spring in order to try and eliminate as far as possible, the star boarders that a number of the farmers have in their stables. Farmers are falling in line, and no doubt it will be a great success.

I have the honour to be, Sir,

Your obedient servant,

A. MACLACHLAN,

Manager.

SUMMARY OF EXPENDITURE FOR THE SEVEN YEARS ENDING 31st OCTOBER, 1918.
Northern and Northwestern Ontario Development Fund.

Description.	Year ending 31st Oct., 1912.	Year ending 31st Oct., 1913.	Year ending 31st Oct., 1914.	Year ending 31st Oct., 1915.	Year ending 31st Oct., 1916.	Year ending 31st Oct., 1917.	Year ending 31st Oct., 1918.	Total Expenditure.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Sec. 1 (a). Works.....	.....	.....	2,100 00	.....	.....	.....	.....	2,100 00
Sec. 1 (b). Roads	193,082 80	1,081,172 28	791,443 08	582,914 80	513,533 75	485,493 33	633,821 43	4,281,461 47
Sec. 1 (d). Farms .....	.....	.....	9,035 11	8,075 68	10,125 53	18,181 52	9,551 96	54,969 80
Sec. 1 (e). Creamery, New Lis- heard .....	.....	.....	.....	.....	.....	15,624 86	7,822 39	23,447 25
Sec. 3 Seed Grain.....	.....	.....	.....	98,920 26	24,916 63	31 50	11,342 47	135,210 86
Returned Soldiers' and Sailors' Settlement Act, 1917, Clause 5	.....	.....	.....	.....	.....	138,812 05	466,276 09	605,088 14
Clause 9 (Amending Act 1916)	193,082 80	1,081,172 28	802,578 19	689,910 74	548,575 91	658,143 26	1,128,814 34	5,102,277 52
Settlers' Loan Account.....	.....	.....	.....	.....	26,370 98	370,731 99	43,524 83	440,627 80
	193,082 80	1,081,172 28	802,578 19	689,910 74	574,946 89	1,028,875 25	1,172,339 17	5,542,905 32

November 18th, 1918

ARTHUR E. D. BRUCE,
Secretary and Accountant.

STATEMENT OF EXPENDITURE UNDER NORTHERN & NORTHWESTERN ONTARIO DEVELOPMENT ACTS, 1912 AND 1915.

(From 23rd May, 1912, to 31st October, 1918.)

District	Expenditure year ending 31st Oct., 1918.
1. District of Nipissing, Parry Sound and Muskoka. North Bay to Callander; Petawawa to Pembroke; Callander to Utterson on G. T. Ry.; Powassan to Nipissing Village; North Bay to Markstay on Canadian Pacific Railway	\$44,061 07
2. District of Temiskaming. Haileybury, Englehart, Matheson, Charlton, Swastika, Elk Lake, Larder Lake	101,188 15
3. District of Temiskaming. Cochrane, Porcupine, Iroquois Falls, and Transcontinental Railway from Quebec boundary west 125 miles to Kapuskasing	165,828 66
4. District of Sudbury. Vicinity of the town of Sudbury and Mining District surrounding, and Sudbury-North Bay Trunk Road	57,468 39
5. District of Algoma. Vicinity of Hearst, along Transcontinental and Algoma Central Railways	22,680 97
6. District of Algoma, on Sudbury and Sault Ste. Marie Trunk Road, Sault Ste. Marie to Algoma Mills	10,331 67
7. District of Thunder Bay. Tributary to Port Arthur and Fort William	82,724 52
8. District of Kenora. Vicinity of Kenora and Keewatin and between Wabigoon and Dryden and Oxdrift on Canadian Pacific Railway ..	14,234 31
9. District of Rainy River, in Rainy River Valley	69,480 59
10. Algonquin Provincial Park	13,722 79
11. Manitoulin Island	16,151 51
12. St. Joseph Island	17,960 99
13. Experimental Farm Plots	9,551 96
14. Creamery, New Liskeard	7,822 39
15. Seed Grain	11,342 47
16. General Administration Expenses	17,987 81
	<hr/>
	\$662,538 25
17. Soldiers' Settlement Account	466,276 09
18. Settlers' Loan Account	43,524 83
	<hr/>
	\$1,172,339 17

ARTHUR E. D. BRUCE,
Secretary and Accountant.

STATEMENT OF EXPENDITURE, YEAR ENDING 31ST OCTOBER, 1918.

Making of Roads:

Grigg, A., Deputy Minister, salary	\$400 00	
Whitson, J. F., Commissioner, salary	4,500 00	
Bruce, A. E. D., Secretary and Accountant, salary	3,000 00	
Beardall, F. G., Clerk (allowance on military leave)	1,335 00	
Dower, A. R., Clerk (allowance on military leave)	935 00	
Reid, A., Clerk (allowance on military leave)	728 92	
Lawer, W. L., Bookkeeper, salary	1,475 00	
Laidlaw, Miss B., Stenographer, salary	867 50	
Extra Clerks	4,746 39	
	<hr/>	17,987 81
Wages	\$342,957 34	
Contracts	109,020 97	
Supplies and equipment	163,855 31	
	<hr/>	615,833 62
		<hr/>
		\$633,821 43

Advancement of Settlement and Colonization:

Wages	\$4,603 46	
Contracts	620 00	
Supplies, stock and equipment	4,328 50	
		9,551 96

Creamery at New Liskeard:

Wages	\$2,485 06	
Contracts	528 00	
Supplies and equipment	4,809 33	
		7,822 39

Seed Grain:

Wages	\$195 82	
Seed, freight and expenses	11,146 65	
		11,342 47

*Returned Soldiers' and Sailors' Land Settlement Act—
Monteith and Kapuskasing:*

W. G. Nixon, Superintendent, salary	\$2,166 67	
Wages	149,405 93	
Contracts	85,797 75	
Construction of settlers' houses and other buildings, railway siding, equipment and supplies	228,905 74	
		466,276 09
		\$1,128,814 34

Settlers' Loan Department:

Dane, F., Commissioner, salary	\$5,000 00	
Kennedy, W. K. P., Accountant, salary	2,500 00	
Crawford, Miss G., Stenographer, salary	732 50	
		\$8,232 50
Net amount of loans issued	\$34,817 43	
Expenses	474 90	
		35,292 33
		43,524 83
		\$1,172,339 17

ARTHUR E. D. BRUCE,
Secretary and Accountant.

SPECIAL WARRANT ACCOUNTS.

ADMINISTERED BY THE NORTHERN DEVELOPMENT BRANCH.

EXPENDITURE TO 31ST OCTOBER, 1918.

Order-in-Council dated 30th September, 1916—

Erection of log house at Ottawa Exhibition	\$1,776 50	
Free Seed Grain for seeding down burnt lands	9 63	
Erection of Stock Judging Pavilion, New Liskeard	20,132 09	
		\$21,918 22

Part of Order-in-Council, 10th October, 1916—

Erection of schools at Matheson and Porquis Junction (Bal- ance refunded to Provincial Treasurer)		15 08
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Order-in-Council dated 20th February, 1917—

Cost of rams purchased (19)	\$565 00	
Expenses and freight	29 88	
		594 88

Order-in-Council dated 18th May, 1917—

Purchase of horses and other live stock		
Cost of 40 cattle and expenses in connection therewith		4,780 05

Order-in-Council dated 18th May, 1917—

Returned Soldiers' Recreation Account—Expenditure, 1918 1,193 73

Order-in-Council dated 11th December, 1917.

Relief of sufferers in Halifax disaster; purchase of glass,
beaver board, tar paper, sheets and pillow cases 20,996 96

\$49,498 92

REVENUE ACCOUNT, 1918.

The Making of Roads:

Refund on bridges and sale of supplies and stock \$3,357 96

Advancement of Settlement and Colonization:

Sale of pulpwood, produce, etc., and rent 2,369 21

Creamery at New Liskeard:

Sale of butter, cream, cans, etc. 5,068 88

Seed Grain:

Notes retired and cash paid 12,853 86

Returned Soldiers' and Sailors' Land Settlement Act:

Sale of provisions, supplies, board and equipment, etc.... 43,499 99

Special Warrant Accounts:

Sales and refunds 5,647 68

\$72,797 58*Settlers' Loan Account:*

Payments on principal, interest and refunds 45,184 63

Total Revenue under all heads, 1918 Account \$117,982 21

NORTHERN DEVELOPMENT BRANCH.

SEED GRAIN.

Amount refunded by Settlers for Seed Grain Supplied.

Oct. 31st 1915, by notes retired and cash paid \$3,171 36

Oct. 31st, 1916, by notes retired and cash paid 29,320 00

Oct. 31st, 1917, by notes retired and cash paid 18,119 04

Oct. 31st, 1918, by notes retired and cash paid 12,853 86

Total refunded, 4 years ending 31st October, 1918 \$63,464 26

RECORD OF CORRESPONDENCE.

For year ended 31st October, 1918.

Letters received 8,203

Letters mailed 6,202

Circulars mailed 1,348

7,550ARTHUR E. D. BRUCE,
Secretary and Accountant.

Appendix No. 31.

REPORT OF THE FORESTRY BRANCH, 1918.

SIR,—The report of the work of the Forestry Branch for the year ending 31st October, 1918, falls into the three sections of Forest Protection, Reforestation, and Tree Diseases.

I. FOREST PROTECTION.

(1) Legislation.

The only change in The Forest Fires Prevention Act, under which forest protection is carried on, is an amendment passed at the last session of the Legislative



1—Type of light truck used by the Forestry Branch in fire protection service.

Assembly which provides for arrangements with an owner for additional protection. In such cases the Minister appoints extra rangers who are paid by the owner of the land, the remuneration to be approved by the Minister. Under this amendment four extra rangers were appointed this season.

(2) Organization and Personnel.

Some re-arrangement of district boundaries was made involving consolidation in five cases and sub-division in two others, resulting in a reduction of the Chief Ranger Districts to 32. An additional Inspector was appointed, making four inspectorates of the Province, with headquarters at Cochrane, Nipigon, Sudbury and Parry Sound. The number of Deputy Chief Rangers, whose duties are entirely supervisory, was increased to 41 this season. With 32 Chiefs this pro-

vided for direct field supervision on the basis of one to every 15 rangers. The Inspectors, working under the Superintendent, form the connecting link between the field and head office.

The spring opened early and being continuously dry the fire season opened much earlier than in 1917. April pay lists totalled 212 names and May, 1,002 names, as compared with 84 and 828 respectively in 1917. Moreover, the May pay list was for the full month in most cases. In addition it was found necessary to raise the general scale of rangers' wages throughout by 25 cents per day, thus increasing the season's pay roll expenditure by 10 per cent. This was partly offset by the wet weather in September allowing of a curtailment. The number of names appearing on the monthly pay lists was: April, 212; May, 1,002; June, 1,094; July, 1,117; August, 1,047; September, 929; October, 27. Of this number, 538 rangers were on the force of 1917. The pay roll for the whole field force for the season amounted to around \$416,500. The other main items of expenditure were, in round figures: equipment, \$28,350; expendable property, \$10,700; travelling expenses on inspection work, \$13,440; improvement work, \$4,280; extra assistance for fire fighting, \$1,445; express, freight, cartage, telephone and telegraph tolls, etc., \$5,365.

In connection with the protection of forest land under license, the Department receives from the licensees recommendations for fire rangers. On this basis, some 218 rangers were appointed for 1918 on the recommendation of 90 licensees for 10,050 square miles, an average of 46 square miles (29,440 acres) per ranger. The licensed area protected totalled approximately 16,900 square miles, representing some 255 licensees.

(3) *Records.*

This season Chief Rangers were required to submit a report weekly covering all phases of the work in their district. Rangers keep a daily diary, using a prescribed blank form, and these diaries are forwarded to Head Office monthly. Operators of railway motor cars, automobiles and boats, send in a weekly report showing movements and mileages each day with consumption of gasoline and oil. A system of property accounting has been instituted in connection with the recommendation of accounts for payment in Head Office. A card system has been inaugurated for recording cost of protection in each chief ranger district, together with a classification of the expenditures.

(4) *Fires.*

The weather during the fire season of 1918 was abnormal in several respects. March was a comparatively mild month, as also was April with a mean temperature 2.5 degrees above normal. In addition April was unusually dry throughout. May provided some exceptionally hot weather, so that on the whole the mean monthly temperature was 5 degrees above normal. On top of this the rainfall was below the average. As a result the patrol force had to be sent out about two weeks earlier than usual, and practically brought up to the maximum number the first week in May. Thus there were 212 and 1,002 rangers in April and May respectively on duty as compared with 84 and 828 in 1917. The summer months were conducive to a low fire risk with the exception of two very hot dry weeks in August. With the exception of the western end of Ontario, September rains were frequent and heavy, and it was possible to call off the patrol by the 15th in many districts and around the 20th in the southern ones. The season as a whole was distinctly favourable for fire control.

Classification of Forest Fires, 1918

By Month			By Origin			By Size				
1918		1917	1918		1917	1918		1917		
	No.	No.		No.	%	%	No.	%	%	
April.....	79	449	Settlers	78	8.1	8.2	¼ ac. and under....	391	40.5	36.3
May	215		Campers	79	8.2	8.9	Over ¼ to 5 ac.....	325	33.7	19.5
June.....	273	320	Railways	449	46.5	49.5	Over 5 to 10 ac.....	58	6.0	4.8
July.....	124	158	Lightning	37	3.8	2.9	Over 10 to 100 ac..	131	13.6	9.5
August	268	117	Indians.....	14	1.5	5.6	Over 100 to 500 ac..	49	5.1	4.7
September.	6	66	Logging oper..	40	4.1	4.1	Over 500 ac.....	11	1.1	25.2
			Miscellaneous	44	4.6	3.6				
			Unknown.....	224	23.2	17.8				
	965	1110		965	100.0	100.0		965	100.0	100.0

Railway Fires.—As in 1917, nearly one-half (46.5 per cent.) of the total number of fires for the season was of railway origin, that is to say, to defective locomotives or carelessness on the part of railway employees. The unsatisfactory condition of fire protective appliances on locomotives is evident from the statement regarding locomotive inspection farther on in this report. Along with this it must be remembered that right-of-way conditions are at least equally as important as the maintenance standard of locomotives from the standpoint of forest fire hazard.

It must be clearly kept in mind that by “ railway fires ” are meant specifically those of railway origin. The term does not by any means include all those fires occurring along railway lines. Thus, this season, 538 fires were reported as starting on the right-of-way or immediately adjacent thereto. As to cause, these were classified thus: due to railways, 449; other known causes, 19; of unknown origin, 70; that is to say 89 fires or 16.5 per cent. of those along railway lines were not charged to railway operation.

STRICTLY RAILWAY FIRES, 1918

Railway	Mileage through Forest Section	No. Fires	Per cent of total fires
C.N.R.	1,455	114	25.4
C.P.R.	1,430	112	24.9
C.G.R.	950	98	21.8
G.T.R.	375	60	13.4
T. & N.O.	312	47	10.5
A.C.	330	5	1.1
A.E.	85	13	2.9
	4,940	449	100.0

In the case of all the above lines the majority of the fires were reported from a comparatively small percentage of the total mileage concerned. Thus of the 114 Canadian Northern fires, 29, 24, 14 and 10 fires occurred on the Ruel, Muskoka, North Bay and Maynooth subdivisions respectively; that is to say, two-thirds of the fires happened on 4 out of the 13 subdivisions. Likewise in the case of

Canadian Pacific Railway, the Nemegos subdivision with 35 fires, Mactier with 28, North Bay with 14, and Parry Sound with 10 fires, accounted for over three-quarters of the 112 Canadian Pacific fires.

Other Causes.—After the railways the careless camper was the cause of the next largest number of fires, namely, 9.7 per cent. of the total (including Indians), as against 14 per cent. last season.

Land clearing operations by settlers caused 78 fires or 8.1 per cent. of the total. Of these, 50 fires were outside, and 28 fires inside, the permit area. Of the latter, 17 were cases of fires set out under permit getting beyond control, and 11 were cases of violations of the Permit Regulations, half of them instances of



2—Forest planting on sand lands at the Provincial Forest Station, Norfolk County, 1909.

misunderstanding. Prosecutions were conducted in 5 cases and convictions secured in all.

Forty fires were connected with logging operations. These included carelessness of river drivers, cleaning up around camps, and defective logging locomotives.

Area Burned.—Forty per cent. of all fires did not exceed one-quarter acre in size, and nearly three-quarters of them did not get beyond 5 acres in extent.

The total area burned over was 30,172 acres, classified thus:

Timbered land, 4,757 acres (15.8 per cent.); cut-over land with some timber left, 11,174 acres (37.0 per cent.); young growth, 7,100 acres (23.5 per cent.); barren and grass land, 7,141 acres (23.7 per cent.) It must again be pointed out that cut-over land and young growth, as representing the forest land that has been logged over with the resultant hazardous slash, constituted 60 per cent. of the total burned over area.

STATEMENT OF FOREST FIRES, 1918

District	Number of fires	Timber land mainly coniferous (i.e. softwood)	Timber land mainly hardwood	Cut-over land, some softwood left	Cut-over land, some hardwood left	Young growth mainly coniferous	Young growth mainly hardwood	Barren land	Grass land	Totals (acres)
I. Western Inspectorate—										
1 Kenora District.....	21	403	.....	985	.....	7	.....	1	.....	1,396
2 Rainy River.....	47	327	100	575	1,920	10	7	555	27	3,521
3 Thunder Bay.....	65	98	.....	321	486	188	100	406	61	1,660
4 Nipigon.....	11	1	.....	.....	.....	.....	611	.....	7	619
5 C. G. R. —Western.....	77	.....	.....	2	.....	20	.....	89	8	119
6 C. G. R. —Central.....	18	.....	.....	.....	.....	2	.....	.....	2	4
II. Northern Inspectorate										
1 Hearst.....	13	.....	.....	1	.....	.....	.....	.....	2	3
2 Cochrane.....	35	.....	.....	87	.....	.....	110	11	11	219
3 Abitibi.....	7	.....	.....	11	4	.....	.....	6	.....	21
4 Timmins.....	18	370	.....	113	18	301	.....	76	.....	878
5 Matheson.....	24	.....	.....	36	.....	10	43	9	.....	98
6 New Liskeard.....	16	15	.....	555	.....	10	100	430	.....	1,110
III. Central Inspectorate—										
1 Soo.....	13	320	.....	.....	850	20	5	1,283	36	2,508
2 Webbwood.....	23	.....	78	.....	35	10	45	436	57	661
3 Sudbury.....	42	.....	.....	29	.....	48	441	8	7	533
4 Sturgeon Falls.....	8	.....	.....	.....	320	.....	.....	2	.....	322
5 North Bay.....	34	27	14	1	1	.....	154	733	5	935
6 Mississagi.....	11	31	.....	.....	2	1	.....	.....	.....	34
7 Chapleau.....	59	53	26	746	.....	166	8	68	14	1,081
8 Foleyet.....	46	453	.....	1,517	.....	234	.....	5	4	2,213
9 Timagami, West.....	1	.....	.....	2	.....	.....	.....	.....	.....	2
10 Timagami, South.....	17	150	.....	40	400	2	.....	6	2	600
11 Timagami, East.....	10	1	.....	.....	.....	7	.....	.....	.....	8
12 Timagami, North.....	6	2	.....	.....	.....	4	.....	3	.....	9
13 T. & N.O., South.....	27	.....	.....	.....	.....	.....	.....	.....	5	5
IV. Southern Inspectorate—										
1 Parry Sound.....	33	13	.....	513	47	.....	172	127	317	1,189
2 Muskoka.....	91	90	38	55	750	114	586	1,394	51	3,078
3 Algonquin, North.....	46	166	800	9	150	225	1,532	374	10	3,260
4 Algonquin, South.....	79	503	575	63	5	25	608	209	27	2,015



3—Plantation on sand lands of Jack Pine and Scotch Pine, one year after planting.



4—Same plantation as shown in Fig. 3, after three seasons' growth.

(5) *Permits.*

The issuance of permits to settlers to set out fire for clearing land is practically confined to the townships based on the T. & N. O. railway between Cobalt and Cochrane and the C. G. R. from Cochrane to Hearst. In all there were issued 9,590 permits covering 39,683 acres, an average of slightly more than 4 acres per permit, as compared with 3,486 permits for 15,186 acres in 1917. The administration of the permit regulations called for a large number of special rangers, as permits were issued in 136 townships. The following classification shows still further the scattered nature of the permit work:

Twps. in which there were issued.	No. Twps.
Not over 25 permits	71
26 to 50 permits	13
51 to 100 permits	21
101 to 200 permits	20
201 to 300 permits	7
Over 300 permits	4

The majority of the permits, however, were issued in 5 Chief Ranger Districts, as follows:

District	No. of Permits	Area Burned over
Cochrane	3,493	10,267 acres
Matheson	2,346	7,371 "
New Liskeard	2,179	17,868 "
Timmins	651	1,971 "
Hearst	514	1,134 "

The remaining 19 Districts in which permits were issued accounted for but a little more than 4 per cent. of the total number of permits and slightly less than 3 per cent. of the area.

The permit work was heaviest in the following townships:

C'Brien	782 permits	Pacaud	205 permits
Olute	726 "	Kendall	188 "
Glackmeyer	507 "	Armstrong	185 "
Hislop	301 "	Bowman	178 "
Calder	263 "	Carr	175 "
Lamarche	255 "	Dymond	166 "
Fauquier	246 "	Hilliard	161 "
Harley	245 "	Newmarket	159 "
Mountjoy	220 "	Playfair	157 "
Kearns	218 "	Shackleton	149 "

Summary of Permits, 1918

Month	Number	Area
April	29	69
May	2,219	10,940
June	2,899	12,012
July	2,050	7,724
August	2,156	8,339
September	237	599
	9,590	39,683 acres

The administration of the Regulations in the Permit Area has been quite satisfactory this season. But 28 fires were reported as originating from settlers' clearing operations within the Permit Area. Of these, 17 were due to fires set out under permit and escaping from control, burning over 420 acres. The other 11 fires were cases of transgression of the Permit Regulations, some of them where permits had lapsed, the settler not clearly understanding the provisions. Five prosecutions were made and conviction registered in all.

(6) Improvement Work.

The new projects carried out this season were:

New trails constructed	304 miles
Rangers' cabins, 12 ft. by 16 ft.	58
Boat houses	2
Lookout towers	12
Railway motor car house	1
Auto garage	1
Nipigon storehouse, boathouse and office.	

The improvement work was carried out largely with ranger labour, the total cost being \$4,280.

(7) Equipment.

The major items of equipment added this year were as follows: Five Ford auto trucks; five portable fire pumps; six large boats; three railway motor cars; thirty-six railway velocipedes; one hundred tents; sixty-five canoes; blankets, 1,835 pounds.

The usual fire signs were sent out, together with 10,000 copies of a new sign. Two thousand large calendars were distributed for educational effect. A booklet of General Instructions for all field officers was prepared and sent out.

(8) Railway Inspection Under B.R.C.

A change was made this year in the handling of the work of the Board of Railway Commissioners for Canada. The special position of B.R.C. Inspector was abolished, and the Board work added to the duties of the Chief Rangers, with the exception of inspection of fire protective appliances on locomotives. This part of the work was looked after by two inspectors who devoted their whole attention to it, because, as already pointed out, approximately half of Ontario's forest fires for the past two seasons, have been of railway origin. The locomotive inspection facts are tabulated below.

Locomotive Inspections, 1918

Railway	Number Inspected					Total Number Locomotives	Total Number Inspections	Inspections Showing Defects	Percentage Defective		Cost per Inspection
	Times										
	1	2	3	4	5						
C.P.R.	119	73	40	12	3	247	448 (328)*	163 (64)	36.4	(19.5)	
C.N.R.	80	26	14	12	2	134	232 (154)	52 (61)	22.4	(39.6)	
G.T.R.	75	30	12	2	1	120	184 (60)	52 (12)	28.3	(20.0)	
A.C.	14	3	4	1	..	22	36 (37)	14 (17)	38.8	(45.9)	
A.E.	1	5	..	1	1	8	20 (36)	14 (20)	70.0	(55.5)	
						531	920 (615)	295 (174)	32.1	(28.3)	\$2.59

*Number in brackets are corresponding figures for 1917.

In all, 920 inspections were made of 531 locomotives at 37 different points, and of these, 295 inspections or almost one out of every three showed conditions below the standard requirements of the Board as regards fire protective appliances. Some of these were minor defects to be sure, but the showing on the whole is decidedly unsatisfactory. The average percentage of defective locomotives is higher than last season, and higher in the case of nearly all the railway systems. Percentically, the Canadian Northern shows a great improvement over last year. But the percentage defective does not present the whole situation as regards starting forest fires, for while the C.N.R. engines showed an improvement in conditions and the C.P.R. made a poorer showing (as compared with the previous season) yet the two lines this year showed respectively 114 and 112 fires of railway origin on practically equal mileages through forest section. The explanation lies mainly in the right-of-way conditions which are admittedly bad along the C.N.R. With the cessation of war and freer labour conditions we can expect an improvement in this phase of the work next year.

As in past seasons, the Chief Fire Inspector of the B.R.C. laid down certain requirements as regards patrol by the railway companies along their lines. In so far as special patrolmen for forest fire protection purposes are concerned, the requirements relate mainly to the C.N.R. Twenty-six special patrolmen were called for between Pembroke and Nipigon by the Board's order, but this requirement was not lived up to by the company in anything like a thorough manner. The same unsatisfactory state of affairs has obtained in the past, and it would appear that the only solution will be for the Forestry Branch to put on the patrol.

The co-operative arrangement on the part of the Temiskaming and Northern Ontario Railway Commission in 1917, whereby their locomotives were regularly inspected by us, was continued this season. One hundred and twenty-six inspections of 39 locomotives were made, of which 42 or exactly one-third showed defects.

Ten locomotives used in logging, etc., were required to be brought up to the equivalent of B.R.C. specifications.

The annual statistical report made to the Chief Fire Inspector of the B.R.C. follows:

STATISTICAL REPORT OF FIRES ORIGINATING WITHIN 300 FEET OF RAILWAY LINES IN
ONTARIO FOR THOSE LINES SUBJECT TO THE JURISDICTION OF THE BOARD
OF RAILWAY COMMISSIONERS FOR CANADA. SEASON, 1918.

	G. T. R.	C. P. R.	C. N. R.	A. E.	A. C.	Totals	1917 Totals
<i>(a) Railway Fires:</i>							
1. Number, by causes:							
(a) Locomotives, Class A fires	16	18	63	3	4	104	17
Class B fires	41	86	40	1	5	173	119
(b) Employees, Class A fires	.....	.....	2	1	3	6	3
Class B fires	3	8	9	.....	1	21	14
(c) Total of Class A fires....	16	18	65	4	7	110	20
Total of Class B fires....	44	94	49	1	6	194	133
Total of Railway fires....	60	112	114	5	13	304	153
2. Areas burned:							
(a) Young forest growth, acres	203 $\frac{1}{2}$	264 $\frac{1}{2}$	293	.....	2	763	338
(b) Timber land	29	256	466	.....	3	754	110 $\frac{1}{2}$
(c) Slashing or old burn	637 $\frac{1}{2}$	2,253 $\frac{1}{2}$	1,985	.....	44 $\frac{3}{4}$	4,920 $\frac{3}{4}$	5,069 $\frac{1}{2}$
(d) Other classes of land	77 $\frac{3}{4}$	307 $\frac{7}{8}$	38	40	.....	463 $\frac{5}{8}$	733 $\frac{3}{8}$
(e) Total	947 $\frac{3}{8}$	3,081 $\frac{17}{16}$	2,782	40	49 $\frac{3}{4}$	6,901	6,251 $\frac{1}{2}$
3. Value of property destroyed:	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
(a) Young forest growth....	20 00	497 50	1,051 00	.....	1 00	1,569 50	121 00
(b) Standing timber.....	249 00	771 75	3,588 50	.....	70 00	4,679 25	263 00
(c) Forest products	693 75	.....	39 00	.....	.....	732 75	.....
(d) Other property	1,774 30	296 15	1,166 00	131 50	75 00	3,442 95	874 75
(e) Total	2,737 05	1,565 40	5,844 50	131 50	146 00	10,424 45	1,258 75
<i>(b) Known Causes other than Railway Systems.</i>							
1. Number due to:							
(a) Campers and Travellers							
Class A fires....	.....	1	2	.....	.....	3	.....
Class B fires	.....	.....	1	.....	.....	1	.....
(b) Settlers, Class A fires....	.....	.....	.....	.....	.....	.....	1
Class B fires....	.....	.....	1	.....	.....	1	2
(c) Other known causes,							
Class A fires....	.....	.....	5	.....	.....	5	.....
Class B fires....	.....	.....	2	.....	1	3	4
(d) Total of Class A fires....	.....	1	7	.....	.....	8	1
Total of Class B fires....	.....	.....	4	.....	1	5	6
Total of other known causes.....	.....	1	11	.....	1	13	7
2. Areas burned:							
(a) Young forest growth....	.....	.....	25	.....	.....	25	.....
(b) Timber land.....	.....	.....	2	.....	.....	2	.....
(c) Slashing or old burn	.....	.....	60	.....	.....	60	505 $\frac{1}{2}$
(d) Other classes of land	.....	.....	1	.....	$\frac{1}{2}$	1 $\frac{1}{2}$	$\frac{1}{4}$
(e) Total	.....	.....	88	.....	$\frac{1}{2}$	88 $\frac{1}{2}$	505 $\frac{3}{4}$
3. Value of property destroyed:	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
(a) Young forest growth....	.....	.....	40 00	.....	.....	40 00	.....
(b) Standing timber.....	.....	.....	30 00	.....	.....	30 00	.....
(c) Forest products	.....	.....	7,000 00	.....	.....	7,000 00	240 00
(d) Other property	.....	.....	10,174 00	.....	.....	10,174 00	.....
(e) Total	.....	.....	17,244 00	.....	.....	17,244 00	.....

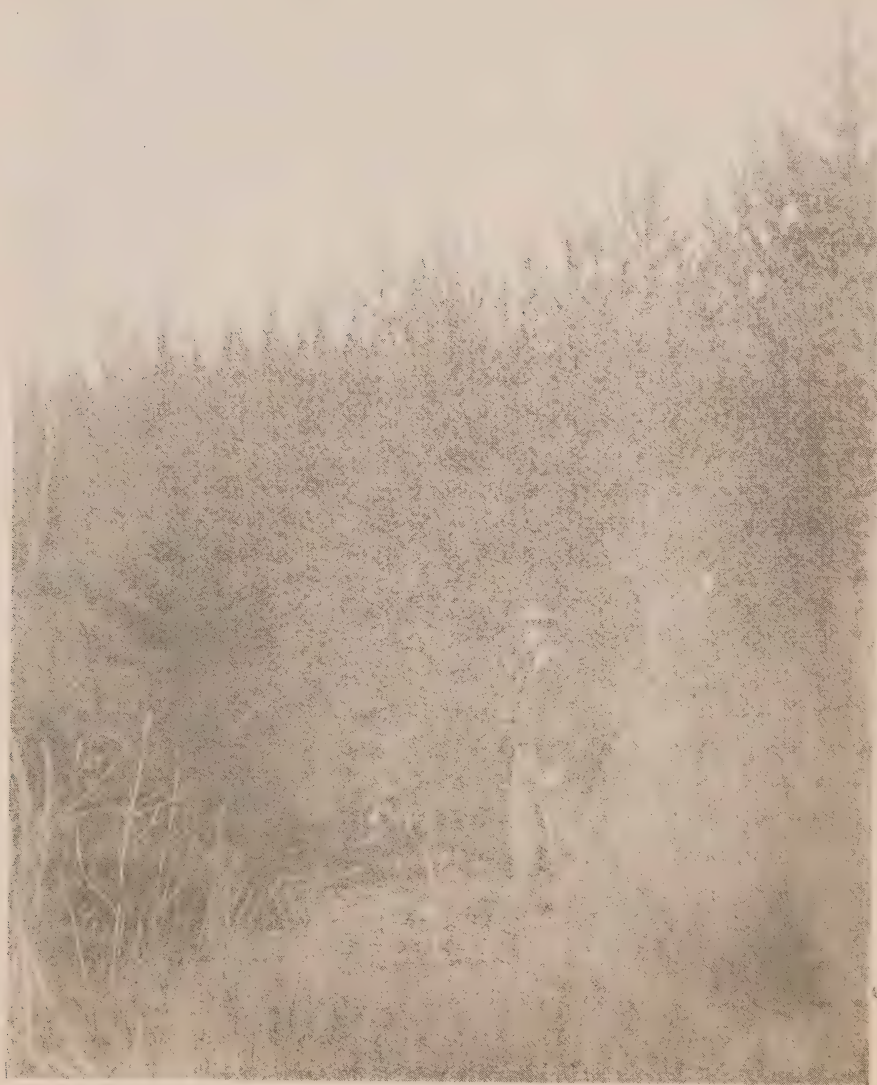
STATISTICAL REPORT OF FIRES ORIGINATING WITHIN 300 FEET OF RAILWAY LINES
IN ONTARIO, ETC.—Continued.

	G. T. R.	C. P. R.	C. N. R.	A. E.	A. C.	Totals	1917 Totals
<i>(c) Fires of Unknown Origin:</i>							
1. Number:—							
(a) Total of Class A fires....	1	6	3	1	.....	11	12
(b) Total of Class B fires....	2	18	11	.....	3	34	52
(c) Total of all unknown fires	3	24	14	1	3	45	64
2. Areas burned:—							
(a) Young forest growth....	1	80	5	.....	.....	86	31
(b) Timber land .....	.....	6	.....	.....	.....	6	14
(c) Slashing or old burn....	5	739 $\frac{1}{4}$	163	.....	2	909 $\frac{1}{4}$	6,844 $\frac{3}{4}$
(d) Other classes of land ....	.....	40 $\frac{1}{4}$	6 $\frac{1}{2}$	3	1 $\frac{1}{2}$	51 $\frac{1}{2}$	176 $\frac{1}{4}$
(e) Total	6	865 $\frac{1}{2}$	174 $\frac{1}{2}$	3	3 $\frac{1}{2}$	1,052 $\frac{1}{2}$	7,066 $\frac{1}{2}$
3. Value of property destroyed.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
(a) Young forest growth....	5 00	.....	.....	.....	.....	5 00	7 00
(b) Standing timber .....	.....	.....	.....	.....	.....	.....	108 00
(c) Forest products .....	.....	.....	.....	.....	.....	.....	2,482 70
(d) Other property .....	.....	30 00	280 00	.....	.....	310 00	555 00
(e) Total	5 00	30 00	280 00	.....	.....	315 00	3,152 70
<i>(d) Grand Totals for all Causes:</i>							
1. Number:—							
(a) Total of all Class A fires.	17	25	75	5	7	129	33
(b) Total of all Class B fires.	46	112	64	1	10	233	191
(c) Total of all fires reported	63	137	139	6	17	362	224
2. Areas burned:—							
(a) Young forest growth....	204 $\frac{1}{2}$	344 $\frac{1}{2}$	323	.....	2	874	369
(b) Timber land	29	262	473	.....	3	767	124 $\frac{1}{4}$
(c) Slashing or old burn....	642 $\frac{1}{4}$	2,992 $\frac{3}{4}$	2,208	.....	44 $\frac{3}{4}$	5,887 $\frac{5}{8}$	12,420 $\frac{1}{4}$
(d) Other classes of land	77 $\frac{3}{4}$	348 $\frac{1}{8}$	45 $\frac{1}{2}$	43	1 $\frac{1}{2}$	515 $\frac{7}{8}$	910 $\frac{3}{8}$
(e) Total	953 $\frac{3}{8}$	3,947 $\frac{5}{8}$	3,049 $\frac{1}{2}$	43	51 $\frac{1}{4}$	8,044 $\frac{1}{2}$	13,823 $\frac{1}{4}$
3. Value of property destroyed:	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
(a) Young forest growth....	25 00	497 50	1,091 00	.....	1 00	1,614 50	128 00
(b) Standing timber	249 00	771 75	3,618 50	.....	70 00	4,709 25	371 00
(c) Forest products	693 75	.....	7,039 00	.....	.....	7,732 75	2,722 70
(d) Other property	1,774 30	326 15	11,620 00	131 50	75 00	13,926 95	1,429 75
(e) Total	2,742 05	1,595 40	23,368 50	131 50	146 00	27,983 45	4,651 45

II. REFORESTATION.

The work of this Branch in connection with reforestation during the past season has been chiefly concerned with the Provincial Forest Station in Norfolk County.

This Station was established with the following objects in view. To develop a Provincial nursery where forest nursery stock could be grown for distribution to prospective planters throughout Ontario. Also to demonstrate the feasibility of reclaiming worthless lands by reforestation, and to experiment with the various species of forest trees in relation to this work.



5—View of eight-year-old Jack Pine planting. This is the 1909 planting as shown in Fig. 2.

The following is a list of the stock grown in the nurseries at the Station in Norfolk County:

Scotch Pine (<i>Pinus sylvestris</i>), seedlings	300,000
Scotch Pine (<i>Pinus sylvestris</i>), transplants	97,000
Larch (<i>Larix europææ</i>), seedlings	80,000
Jack Pine (<i>Pinus divaricata</i>), seedlings	51,200
White Cedar (<i>Thuja occidentalis</i>), transplants	41,000
White Spruce (<i>Picea canadensis</i>), transplants	28,300
White Pine (<i>Pinus strobus</i>), transplants	20,000
Red Pine (<i>Pinus resinosa</i>), transplants	5,200
Austrian Pine (<i>Pinus austriaca</i>), transplants	4,500
Miscellaneous conifers	2,500
White Elm (<i>Ulmus americana</i>)	14,300
Sugar Maple (<i>Acer saccharum</i>)	11,600
Black Walnut (<i>Juglans nigra</i>)	5,150
Butternut (<i>Juglans cinerea</i>)	5,000
Manitoba Maple (<i>Acer negundo</i>)	2,700
White Ash (<i>Fraxinus americana</i>)	2,700
Tulip (<i>Liriodendron tulipifera</i>)	2,500
Hackberry (<i>Celtis occidentalis</i>)	2,500
Chestnut (<i>Castanea dentata</i>)	1,900
Miscellaneous hardwoods	3,700
Total	681,750

During the past season fifty acres of scrub oak lands were underplanted with white pine. The older plantations are thriving and some very interesting comparisons in the rate of growth of the various species can be shown.

Very little demand has been made by the public for planting material during the past season. This lack of demand is probably caused by abnormal labour conditions. During this season we shipped 100,000 plants to other parts of the Province for experimental planting.

A preliminary survey of the sand dunes in Prince Edward County was made with a view to reforestation. This sand formation presents a different problem from that in Norfolk. The formation is made up of sand ridges with very little vegetation left. These ridges are shifting, forming dunes which will be more difficult to control than the blowing sand on level areas.

III. TREE DISEASES.

The work on White Pine Blister Rust has been followed up this season along lines indicated in previous reports.

As indicated last season the stage of the disease found on *Ribes* (currants and gooseberries) is found throughout the older portion of the Province. Its distribution is so widespread that no methods of general eradication seem possible. Scouting done in the Rainy River, Sudbury and Temiskaming Districts failed to show that the disease had spread into these regions. It was found at points in Renfrew County and it is evident that it will gradually work northward unless some means of eradication are developed.

It has been found that white pine is practically safe if the *Ribes* are eradicated within a few hundred yards of the pine. Following upon this theory we have started the work of eradicating all *Ribes* from the Provincial Forest Station in Norfolk where white pine is one of the important species. This seems feasible where isolated blocks of white pine exist as in woodlots of Southern Ontario.

This season's results in eradicating *Ribes* on the Norfolk area will impress upon the layman the difficulty of carrying out this policy in our wild lands to the north.

One field crew of four men working over a period of four months eradicated 28,195 plants on an area of about 100 acres, while this area was abnormal and contained more *Ribes* than usual it indicates the impossibility of carrying on such work over large areas of wild land.

For a number of years enquiries have been coming into the Department regarding the diseased condition of white pine throughout the pine areas of Northern Ontario. White pine has been our most important timber tree but it seems to have many enemies. Following your advice the Forestry Branch is making a special study of this problem. The whole policy of handling white pine forests may be influenced by such a study.

Following instructions from this Department, Dr. J. H. Faull, of the University of Toronto, a specialist in plant pathology has undertaken a special study of these problems and you will find his preliminary report appended:



6—Mixed plantation of Scotch Pine and Larch made in 1912 at the Provincial Forest Station.

Preliminary Report of Dr. J. H. Faull:

“The science of forest pathology deals with the health of the forest and that of its products; therefore, the forest pathologist is concerned with the welfare of the standing timber and of the nursery, with the preservation from decay of converted timber, with the prevention of discoloration in lumber and in pulp, and with the exclusion of destructive foreign diseases. Some of the problems in this field have been solved and the results made applicable with monetary advantage—thus it has been discovered that decay is caused by fungi, and that ties, posts and structural timber can be profitably treated so as to guard against the invasion of these wood-destroying agents, further that discoloration in lumber and in pulp is due to certain molds which can be warded off at slight expense, and

that quarantine legislation combined with intelligent inspection can be made effective against the intrusion of foreign diseases. But many problems remain unsolved, notably those of the forest with its multiplicity of unstudied diseases and difficulty controlled situations; and it is just here that destruction—perhaps greater than in the case of fire—goes on unceasingly, especially in over-mature stands, or improperly harvested limits, taking a toll of millions every year.

Considerable advance in this direction has been made in Europe with its regulated forests and long-trained experts, but in America where conditions are very different forest pathologists have only in recent years undertaken investigations on the diseases of our vast virgin forests. Naturally such investigations constitute a *sine qua non* first step towards the solution of our own peculiar problems, for we must become acquainted with the diseases of our forests, their



7—Fifty-acre block of Scotch Pine planted in 1911 at Provincial Forest Station.
Trees now six to eight feet high.

nature, distribution, and relative importance before any important contribution can be made to that essential body of information on which Government and lumbermen base progressive action with reference to conservation or control of the forest.

Work of 1918.

The work of the past summer (1918) was centred mainly on a malady of the white pine known as "needle blight," but in addition two cases of pulp blackening were examined and its cause and prevention indicated, two cases of alleged injury to white pine and other species from fumes were reviewed, and a general survey of the timber diseases of the Timagami Forest Reserve (including an extensive collection) was undertaken.

In response to many complaints from Northern Ontario that the white pine was suffering from a yellowing of the foliage I was directed by the Forestry



8—Sand lands in Prince Edward County which were once covered with timber.



9—Sand dune encroaching on plowed field.

Branch to visit the Timagami Forest Reserve where the affection appeared to be particularly severe, and to make an investigation of its cause and its seriousness. Reference to Washington, D.C., elicited the information that while this disease had been reported from the North-eastern United States it was imperfectly known and its cause not yet ascertained. The prevailing impression in Northern Ontario seemed to be that this discoloration originated in late winter or early spring as an effect of frost, but observation proved that it developed in the new leaves in the latter half of July as they emerged from the buds or were as yet in an early stage of their growth, and experiments demonstrated that the symptoms progress slowly from the needle tips downward and may involve from a third to two-thirds or even the whole needle. Many of the blighted needles fall in August and September, but others adhere for a year or longer. One immediate applica-



10—Sand dune covering apple orchard.

tion of this information—already utilized—consists in the fact that it is now possible to recognize this malady as something distinguishable from sulphur fume injury with which it has been confused; and there is a call for such a diagnosis over an area of perhaps 20 miles in radius from roast bed centres.

“Needle blight” is extremely prevalent in the Timagami Forest Reserve. From elevations in the reserve thousands of yellowed trees may be seen, imparting to the normally sombre green coniferous forest the distinctly autumnal tint of a hardwood forest, an effect that is perhaps most pronounced in mid-August. I cannot state how widely spread it may be in Ontario, but I have detected some few cases in Cleland Township, near Sudbury, and some at various points as far south as Gravenhurst and Alliston, also four cases in Rondeau Park on Lake Erie. Trees of all ages are susceptible.

It now remains to be determined whether or not this disease is contagious, the extent of its prevalence, the rate of mortality caused by it, the time required for recovery from the malady, and its effects in such cases on the annual increment of wood. With these ends in view some inoculations were made, some hundreds of diseased trees were noted and marked with numbered metal disks, and a full census of all the white pines taken on a small selected plot.

As a result of the summer's work the following lines of inquiry are in project:

1. A completion of the investigation on the "needle blight" of the pine.
2. A study of the effects of sulphur fumes on pine and especially with reference to the winter roasting of ores.
3. An examination of a brown heart rot of pine, balsam, and spruce which is probably the most destructive agent operating in our northern forests. The special features to be examined refer to the rapidity of development of the decay, the manner and extent of its inroads, and the factors that are responsible for its greater prevalence in some districts than in others.
4. A more complete inventory of the diseases of the pines and the pulpwoods of Ontario."

You will notice that Dr. Faull has found no evidence of White Pine Blister Rust in the Timagami Forest Reserve. His work on "needle blight" and "brown heart rot" should be followed up until we can arrive at some definite conclusions.

I have the honour to be, Sir,

Your obedient servant,

E. J. ZAVITZ,
Provincial Forester.

Appendix No. 32.

RETURNED SOLDIERS AND SAILORS—LAND SETTLEMENT.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

SIR,—I have the honour to report as follows, with regard to the Provincial Scheme of Land Settlement for Returned Soldiers and Sailors.

The Land Settlement Scheme for returned soldiers and sailors was inaugurated in February, 1917, the aim of the scheme being to place returned men in considerable numbers on lands of the Crown in Northern Ontario.

For the present, six townships have been set aside for use in this connection, namely: O'Brien, Owens, Williamson, Idington, Cumming and Shackleton, located some sixty or seventy miles west of Cochrane on the line of the National Transcontinental Railway. These townships with the exception of Shackleton have been surveyed into lots containing 100 acres each instead of the ordinary homestead of 160 acres.

A Training School has been completed at Monteith thirty miles south of Cochrane, on the Temiskaming and Northern Ontario Railway, the school being located on the Government Demonstration Farm consisting of 800 acres. There is a clearing of very considerable size on this farm on which a number of the men have been given instruction in agriculture. They have also been instructed in land-clearing, logging, stumping, etc., on those portions of the farm which have not yet been fitted for the plough.

Briefly, the manner of handling the men is as follows:—Applications are listed in the Department of Lands, Forests and Mines, and from time to time the men are called up in parties of from twenty to forty for examination. Each man is examined by a competent physician to determine his physical fitness for farm work. After medical examination the applicants appear before a Committee on which is represented the Department of Lands, Forests and Mines, the Department of Agriculture, the Invalided Soldiers' Commission, the Great War Veterans' Association, the Soldiers' Aid Commission, the Canadian Patriotic Fund Committee and the Vocational Training Department. If the men pass the medical examination, and if their applications are approved by the members of the Committee mentioned above, they are deemed eligible to enter the scheme of land settlement. They are then sent forward to the colony located in the Township of O'Brien on the banks of the Kapuskasing River, where they immediately enter into the work which finally enables them to locate in their own houses on their individual holdings. At Kapuskasing they proceed to clear and fit for the plough ten acres on the front of each 100 acre lot—one lot being allowed to each prospective settler.

No charge is made for the land. During the period in which the men are engaged in clearing the ten acres on each lot, they are paid by the Department in one of two ways—either at a certain rate per hour or by contract at a certain figure per acre, determined by the conditions which attend the clearing of any particular lot.

At this point it might not be amiss to give a brief review of what has been accomplished at the Kapuskasing Colony. The Colony is situated on the east bank of the Kapuskasing River immediately south of the National Transcontinental Railway. The river is a stream of large size at this point, and the rapids which occur just at the railway bridge, add greatly to the natural beauty of the place and will doubtless ultimately figure in connection with power development. The following points might be noted:

(a) Nineteen frame houses of five or six rooms each have been erected in the form of a village along the east bank of the Kapuskasing River—the houses being generally occupied by returned men and their families while the necessary clearings are being made on their respective lots, and while the dwellings are being erected thereon. These houses are comfortable and are of good appearance.

(b) A large frame administration building and residence has been erected. This building is occupied partly as an office, and partly as a residence by some of the colony officials.

(c) A dormitory with a modern kitchen, dining room and recreation room has been erected. The living room is equipped with a piano, billiard table and gramophone, and an up-to-date supply of reading material is always available.

(d) Goods are supplied to members of the Colony from a store which has been erected by the Department. This store contains a large and well assorted stock, and goods are supplied to the members of the Colony at cost.

(e) A substantial frame storehouse at the terminus of the railway siding has been provided.

(f) A blacksmith shop has been erected and is in charge of a returned man who followed this trade previous to his enlistment.

(g) A large modern stable for the housing of stock has been erected on the Provincial Government farm. This farm consists of 600 acres, this land having been reserved adjacent to the village—approximately 125 acres will be placed under crop on this farm during the spring of 1919.

(h) A small sawmill has been erected on the east bank of the Kapuskasing River and is used in connection with the furnishing of a supply of lumber for the Colony. Lumber is disposed of to settlers at approximately cost price.

(i) A planing mill for the manufacturing of sash, doors, etc., has been installed and is in continuous operation.

(j) A modern steam laundry is in use for the benefit of the members of the colony.

(k) Approximately half a mile of railway siding has been constructed to connect the colony with the main line of the Transcontinental Railway. A passenger bridge over the Kapuskasing river is nearing completion.

(l) A modern two-roomed school, accommodating 80 pupils, has been opened, with two well qualified teachers in charge. The Public School Inspector for the district reports very favourably on the work which is being accomplished in this school. Three vans are used in conveying the pupils from their homes to the school and return. The expense of maintaining the school is, for the present, borne by the Department.

It will be understood that the men on going to the Colony leave their families in Southern Ontario. Fifty men can be housed at the dormitory, and when the men have had an opportunity to look over the situation, and have fully decided to remain with the scheme, the married members of the colony are permitted to move their families, as far as the accommodation permits, to the houses in the village.

The site of the Kapuskasing colony was selected in May, 1917, by the Minister. On July 13th, 1917, a party of four men left the Monteith Training School, in charge of Major Thos. L. Kennedy, and took up their residence at Kapuskasing. The remainder of the original party of men arrived as Kapuskasing on July 25th, 1917. Since that date, as you will note from the above, a great amount of work has been accomplished. Without going into too great detail, it might be said that good progress has been made in connection with the ten-acre clearings on the individual lots and approximately 60 settlers' houses have been erected. These houses are of substantial construction, and generally speaking cost from \$500.00 to \$700.00 each. Of the cost of the settlers' houses, \$150.00 is borne by the Department—the balance by the settler.

Seventy horses are kept at the settlement. These horses are available for the use of the settlers, as are also farm implements, wagons, sleighs, tractors, etc. It is further proposed to maintain at the colony farm a stock of cattle, sheep and swine.

Financial assistance is available to the settlers to the extent of \$500.00 to each man by way of a loan, secured by a lien on the land and chattels. Re-payment is extended over a period not to exceed 20 years, interest being charged at the rate of six per cent. per annum.

It is hoped to have all the men now at the Colony, settled in their own homes early in the spring of 1919. The completion of the ten-acre clearings will be vigorously proceeded with as weather conditions permit.

It is not proposed to issue a Patent for the holding of any individual until a period of five years from the time of his entry into the scheme has elapsed. The settler must reside on his land for at least six months in each year up to the time of the issue of Patent. Two acres must be cleared and cultivated annually—that is, the settler must clear and put under cultivation, before he can secure a Patent, ten acres in addition to the original ten acres cleared at the expense of the Crown. After being in residence for at least six months, and after

having cleared and put under cultivation two acres, in addition to the original ten acres, the timber other than pine passes to the settler. After six acres in addition to the original ten acres have been cleared and cultivated the pine timber also passes to the settler.

It is, of course, scarcely to be expected that a settler should be able to maintain his family entirely by his agricultural operations on a ten acre clearing. The land, however, is situated in the heart of the Clay Belt District, and is well wooded with spruce and other woods suitable for pulp. The removal and sale of pulpwood will afford a considerable income. A large pulp limit was recently sold in this vicinity and a large pulp mill will shortly be erected at Kapuskasing, which undoubtedly will be of inestimable benefit to the settlers. Further, there is a great amount of work to be done in connection with the building of roads, bridges, etc., so that it seems reasonable to assume that there will be an abundance of work for some time to come for such men as are willing to take advantage of same.

The following statistics are of interest in connection with the history of the scheme:

MONTEITH TRAINING SCHOOL.

Total number who passed through school	88
Total number discharged from school	1
Total number who left school voluntarily	14
Total number who went to Kapuskasing Colony from the school	73

KAPUSKASING COLONY.

Total number of men from Monteith School	73
Total number of men sent direct to Colony	100
Total number discharged from Colony	12
Total number left owing to physical unfitness	80
Total number left owing to family difficulties	19
Total number left for other reasons	29

The previous occupations of the men who entered the scheme are given as follows:

Number of farmers	26	Number of engineers	3
Number of labourers	24	Number of butchers	3
Number of carpenters	16	Number of miners	4
Number of electricians	2	Number of moulders	5
Number of bakers	3	Number of lumbermen	4
Number of blacksmiths	4	Number of teamsters	3
Number of chauffeurs	3	Number of plumbers	4
Number of mechanics	9	Other walks of life	71
Number of clerks	4		

There have entered the scheme:

Married men	141	Widowers	4
Single men	43		

Nationalities are represented as follows:

English	98	Australian	1
Scotch	14	Norwegian	1
Irish	9	American	1
Canadian	61	Manx	1
Italian	1	Negro	1

83 men remain on the scheme at date.

It may seem from the above that the number of men whose connection with the scheme has been severed, is unduly large. However, it has been found that a good number of men have found themselves physically incapable of doing the necessary work involved in the clearing of land. Two hundred and fifty-five men who had applied to enter the scheme have at various times been requested to report for examination and have failed to respond.

This scheme of Land Settlement is unique in character and affords a practical demonstration of the colony plan of settlement, a subject which has been freely discussed but apparently never before thoroughly developed.

In addition it affords a practical demonstration of the agricultural possibilities of the Great Clay Belt, especially that portion of this splendid territory lying adjacent to the National Transcontinental Railway.

It will be appreciated that in a scheme of such magnitude as promises to be the case in this instance, changes of considerable consequence will have to be made from time to time. The men now at Kapuskasing will, of course, be settled in accordance with the terms laid down in the literature pertaining to the original scheme, but it is quite possible that it might be advisable to send future parties of men into the North under slightly different conditions. One of the objects which the Department has in view is to mitigate the loneliness of pioneer life, and the colony plan of settlement is succeeding very nicely in this respect. Again, the scheme places the settler in a comfortable home with a clearing of some size, which also acts as a fire guard, within a comparatively short time from the date of his arrival in the North. The settler also has the use of horses, implements, etc., as soon as needed.

It is hoped that in the near future it will be possible to take care of applicants more quickly than is possible at the present time. The greatly increased cost of labour and supplies of every description during the past few years has operated greatly against the scheme from a financial point of view. These difficulties will no doubt right themselves in a certain measure with the coming of peace, but undoubtedly the high rate of wages prevailing has had a tendency to make the scheme somewhat less attractive and more difficult to operate, than would have been the case under normal conditions.

In conclusion, mention might be made of the services of the late Colony Superintendent, Major Thos. L. Kennedy, of Dixie, Ont., also of Lieutenant-Colonel Robert Innes, late Director of Soldiers' Land Settlement, who is now with the Soldiers' Settlement Board, Ottawa. The work of settlement has been greatly assisted by the construction of colonization roads throughout the Township of O'Brien, under the supervision of Mr. C. H. Fullerton, Superintendent Colonization Roads.

H. M. ROBBINS,

Acting Deputy Minister Lands and Forests.

Toronto, October 31st, 1918.

Appendix No. 33.

WOOD-CUTTING IN ALGONQUIN PARK.

In the early part of the year 1918 the outlook was for a severe shortage of fuel. The war was at its height. There was no prospect of an early peace. The supply of coal from the mines in the United States was with difficulty being maintained, and owing to the movement of very large numbers of troops and an immense volume of war material, transportation conditions became extremely severe.

The Dominion Government had already taken the importation and distribution of coal under its control, and restrictions were placed upon the quantity, especially of anthracite, that individuals were allowed to buy and store, no one being permitted to obtain more than 70 per cent. of his normal supply for the winter of 1918-19. In short, the universal expectation was that fuel, especially for domestic consumption, would be extremely scarce, and that considerable inconvenience and even hardship would be the result.

Under these circumstances the Ontario Government deemed it wise to supplement the supplies of fuel, and to substitute wood for anthracite in the public institutions so far as this could be done, thus releasing an equivalent quantity of anthracite coal, and making it available for domestic consumption. Accordingly, it was decided to undertake wood-cutting operations on a large scale in Algonquin Provincial Park, where extensive tracts covered with birch, maple and beech existed, the property of the Crown, within easy hauling distance of the Canada Atlantic railway. An appropriation of \$100,000 was made by the Legislature to cover the cost of these operations and of other investigations into the fuel question. After public advertisement, contracts were let to the Randolph Macdonald Company, Limited, for the cutting of 10,000 cords of wood, and to B. Ivor for 6,000 cords. These were afterwards increased to 25,000 cords and 10,000 cords respectively. A wood-cutting gang was organized among the Park rangers under the direction of the Park Superintendent, G. W. Bartlett. Later in the year, in November, C. M. McConkey was also given a contract to cut in the month of December. Two railway sidings to facilitate shipment of wood were constructed at the Government's expense at Mile Posts 306 and 314 respectively, and a third siding at Algonquin Park headquarters was repaired and extended.

The privilege of cutting wood in the Park without charge was extended to the municipalities of Ontario. Several of them took advantage of the offer, and the cities of Hamilton, Kitchener, Barrie and Guelph and the town of Mimico let contracts for the cutting of considerable quantities of wood, aggregating some 10,000 or 11,000 cords. These operations were entirely distinct from those of the Government.

Owing to the unusually mild weather in the early part of the winter of 1918-19, continuing throughout January and even into February, and also to the cessation of the war by the signing of the armistice on the 11th of November, the fuel situation was materially modified. As compared with a winter of ordinary severity there has been a general saving of coal. Importations have been coming forward, and the coal dealers are now in a position to supply their customers with all their requirements without difficulty.

There was no longer the same necessity for cutting wood in Algonquin Park. The prices of labour, provisions and supplies generally were very high, and consequently the wood cutting operations have been expensive, the contract price being

\$6.75 per cord loaded on the cars in the Park. The freight charges work out to between \$3 and \$4 per cord on wood delivered at Toronto, Hamilton or similar points. The orders for wood from the Government institutions amounted to about 2,100 cords. This has all been shipped out, and by the end of January about 14,000 cords of wood remained in the Park. This, if the weather is favourable in the months of February and March, will all be hauled out and piled at the railway sidings before the snow goes away in the spring, so that it will be available for shipment during the coming season. The wood will have an opportunity to be seasoned, and will lose in weight, thus reducing the freight charges.

All cutting under contract was stopped at the end of January, and the headquarters gang will finish by the end of February.

T. W. GIBSON,

Deputy Minister of Mines.

Appendix No. 34.

FUEL SUPPLY—WOOD-CUTTING PERMITS TO MUNICIPALITIES.

In order to relieve the fuel situation the Department decided to grant permits to the Municipal Authorities to cut wood for the use of the citizens on lands of the Crown. Our agents were instructed to select areas upon which wood was chiefly suitable for the fuel purposes and only dry or fire killed timber was allowed to be cut for this purpose, and no sawlog timber was to be taken. The wood was to be free of Crown dues. It was the purpose of the Department, in issuing permits to municipalities, rather than to private individuals to make it possible for the citizens to obtain their fuel supply at the least expense.

A number of Municipalities availed themselves of this and made applications through the Crown Timber Agent for permits. Permits were granted to the Municipal Authorities of the Town of Kenora for an aggregate of 8,000 cords of wood, areas being selected by the Municipal Authorities and approved of by the Crown Timber Agent.

The Town of Keewatin was granted a permit covering 500 cords.

The Cities of Fort William and Port Arthur were each granted seven permits for a number of areas and locations, upon which they were allowed to cut the dry and fire killed wood.

The Municipal Authorities of Sault Ste Marie, were granted a permit to cut on lots 10 and 11 in the 6th Concession of Jarvis, an aggregate of 5,000 cords.

The Towns of Webbwood, Fort Frances, Blind River, Cobalt, North Bay, Thessalon and Haileybury applied for and were granted permits to cut sufficient wood to meet the requirements of their citizens.

JOHN HOUSER,
Chief Clerk.

ALBERT GRIGG,
Deputy Minister.

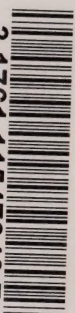
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